# The Rise of the Highland Elamite State in Southwestern Iran

## "Enclosed" or Enclosing Nomadism?[1]

by Abbas Alizadeh

Archaeological and historical reconstructions and interpretations of the origins and development of early state organizations and nomadic-sedentary relations have been viewed primarily from the perspective of sedentary farmers and urban centers. Implicit in such models are assumptions of asymmetric power relationships in which nomads are viewed as not only dependent on settled farmers but also encapsulated within the sphere of urban civilizations. This unidirectional view of political economy also derives from an overdependence on the skewed and biased ancient literature and some twentieth century ethnographic views of nomads in relation to powerful nation-states. This paper offers a series of alternative inferences that are based on well-known archaeological data, as well as a few recent lines of evidence, and a review of relevant archaeological evidence for the existence of social hierarchy and stratification in prehistoric pastoral nomadism in southwestern Iran. In addition, we discuss how vertical mobile pastoralism in the region could have developed independent of settled farmers and how the events that developed in highland Iran resulted in the peculiar characters and features of what we know as Elamite civilization.

## Mobile Pastoralists in South-Central and Southwestern Iran

This study is based on the foundation laid by Robert McC. Adams (1962, 1974), William Sumner (1986, 1988), and Henry Wright (1984, 1987, 1994), whose ideas have advanced research on the relations between the lowlands and the highlands and between the core and the frontier in southwest Asia. Adams showed the importance of looking from outside urban centers, Sumner was the first to suggest the development of nomadism in the Kur River basin in Fars in the third millennium BC, and Wright pioneered systematic research on the relations between the highlands and the lowlands in southwestern Iran (Amiet 1979).

This paper, however, treats this subject matter in a wider geographic area and over a much longer time span that includes late prehistoric times as the prelude to the rise of the highland state that in historical times is referred to by Mesopotamian sources as Elam (NIM$^{KI}$), literally "Highland" (Michalowski 2008; Quintana 1996). The central theme of this analysis is the assumption that the various highland polities that appeared in Mesopotamian sources consisted primarily of seminomadic pastoralists who, by unifying the resources of the highlands and the lowlands, eventually created a durable and powerful state that outlasted its mighty, urban-based Mesopotamian rivals.

The Zagros social groups should not be considered "nomads" in the sense applied to horizontal pastoralists of Central Asian steppes, the Sahara, the Negev, the Jazirah, etc. A more accurate term would be "mobile agropastoralists" or "seminomadic agropastoralists." We consider their spatial mobility in a politically uncentralized region of southwestern Iran before historical times to be ecologically advantageous and militarily a significant factor in their competition for resources, as well as a political mechanism for survival. On the other hand, spatial mobility militates against the development of political centralization (see, e.g., Burnham 1979; Irons 1979). We argue that, in certain environments such as the Zagros

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1. The term "enclosed nomadism" was coined by Lattimore (1962: 484) in reference to the nomads of western Asia, as opposed to those in the vast steppes. Michael Rowton (1974) adopted the term to describe pastoral lands encircled by urban settlements and states. According to Rowton (1974:2–3), a major characteristic of enclosed nomadism is its high degree of symbiotic, economic, and political relationship with the sedentary. In "enclosing" nomadism, the urban centers and farmlands are physically surrounded by core nomadic highland regions, and the political hierarchy, while primarily settled, is drawn from the nomadic society.

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highlands, political hierarchy can develop among nomads not only as a result of influence by and contact with state societies but also, especially in prestate times, through the combination of sedentary farming and mobile herding, what Michael Rowton (1974) called a "dimorphic" chiefdom/state.

Many scholars consider nomads to be essentially separate from and dependent on settled farming communities and urban centers (Cribb 1991:14; Khazanov 1984; among others); some also consider pastoral nomadism a late development (e.g., Bobek 1962; Garthwaite 1983; Lattimore 1951; Lees and Bates 1974). For example, William Sumner (1986) considers the Proto-Elamite period (ca. 3000–2700 BC) to represent a tribal nomadic society, an adaptation that in Fars replaced the town/village settled farming economy. As we have argued here and elsewhere (Alizadeh 2006*a*, 2008*a*), specialized mobile pastoralism began much earlier, in the fifth millennium, was not limited to the Kur River basin of highland Fars, and did not replace the farming economy; rather the two ways of life were combined in a system of political economy that, once established in the early third millennium, endured for more than three millennia. Since the fifth millennium, the lowlands and highlands could be best understood as parts of an interacting system that successfully combined both regions' resources, providing a context within which a durable political system, the Elamite state, developed in the ancient Near East.

As just mentioned, pastoral nomads are usually viewed as being integrated into agrarian societies (Rowton 1974; see also Irons 1979:371; Lattimore 1962:487; Zagarell 1982:109), living on the margin of these societies, and depending on them for a wide range of agriculture and craft products. Most scholars (e.g., Irons 1979:371; Krader 1979; Zagarell 1989:300) also believe that state formation among the nomads was a secondary process and that the military prowess of the historically known nomadic tribes was made possible only by the domestication of the horse and camel. This may have been the case in the vast steppes of Central Asia and Arabia, for example; but as we argue here, in southwestern and south-central Iran, settled farming villages were successfully integrated into the nomadic pastoral economy and the pastoral political economy.[2] Furthermore, as we show below, in many regions of Iran, mobile pastoralism and settled farming are two sides of the same system, and separating them is a false dichotomy.

While Rowton's (1974) analysis, which considered nomadic societies to be enclosed within the spheres of urban societies and agrarian states, is valid for Mesopotamia and Syria, in southwestern and south-central Iran the opposite seems to be the case; that is, it is the settled farming communities that seem to be enclosed within the much larger sphere of the nomadic society and ruled by a hierarchy that was drawn from various highland tribes (figs. 1, 2).

2. For eastern Iran, see Lamberg-Karlovsky and Tosi (1989); for a generally high nomadic-sedentist interaction in the Middle East, as opposed to Central Asia, see Patai (1951) and Bacon (1954).

## Some Major Characteristics of Contemporary Zagros Agropastoralists

Before presenting an overview of the archaeology and history of the regions under discussion, it is helpful to discuss some fundamental characteristics of the Qashqai and the Bakhtiyari, two major contemporary pastoral tribal societies in Iran. In using historical and ethnographic analogy, it is irrelevant whether there is ethnic continuity in a given region. As Hole (1995; see also Kramer 1982; Lewis 1987; and Stone 1981) argues, the most important issue is the correspondence between the environmental setting and how people in that niche make a living. The following description of the two major tribal confederations is therefore not meant as a blueprint for the ancient mobile pastoralists of the region; rather, it is meant to highlight some of the fundamental adaptations that this way of life imposes on the Zagros mobile herders. Furthermore, we must emphasize that we take the idea of historical/evolutionary change in all societies as a given. Therefore, we have emphasized only some fundamental characteristics of Zagros nomadic life that were not necessarily affected by historical and evolutionary changes. We believe that this is warranted because, regardless of some of the contemporary characteristics of these two major tribal societies—including their religious beliefs, ethnicity, kinship ideologies, taxation systems, and relations to the state, all of which were shaped in more recent historical times—the geography, environmental features, and natural resources that encouraged this way of life, as well as patterns of land use, mobility, and migratory routes, are less subject to historical and evolutionary change.

In many ways, the mobile tribes in this region of Iran differ fundamentally from steppe nomads. First, despite their seasonal migrations, the Zagros pastoralists spend only a fraction of the year on the move. In their summer pastures in high altitudes, they occupy regions that consist of both small, fertile valleys and lands not suitable for grain agriculture and thus sparsely populated; in their winter pastures of Fars and lowland Khuzestan (ancient Susiana), they stay put for several months in a fertile and heavily populated land. In earlier times, both Bakhtiyari and Qashqai khans (chiefs) resided in the middle of some of the intermontane valleys in relatively modest, mud brick–fortified centers surrounded by hundreds of tents and a few small villages (see also Stein 1940:99; Wells 1883:146). The ruined remnants of most of these fortified centers can still be seen in many parts of Iran (fig. 3). In addition to these mountain mud brick castles, the paramount and higher-ranking khans also had substantial residences in the major urban centers of Esfahan, Shiraz, Firuzabad, and Shushtar.

Most Zagros tribes collectively possess permanent and semipermanent villages with solid architecture in both their summer and, especially, their winter territories, in close proximity to settled farmers and urban centers (fig. 4). In addition to villages with solid architecture (Beck 1986:187; Garrod 1946; Garthwaite 1983:30; Lambton 1953:289), the tribes also

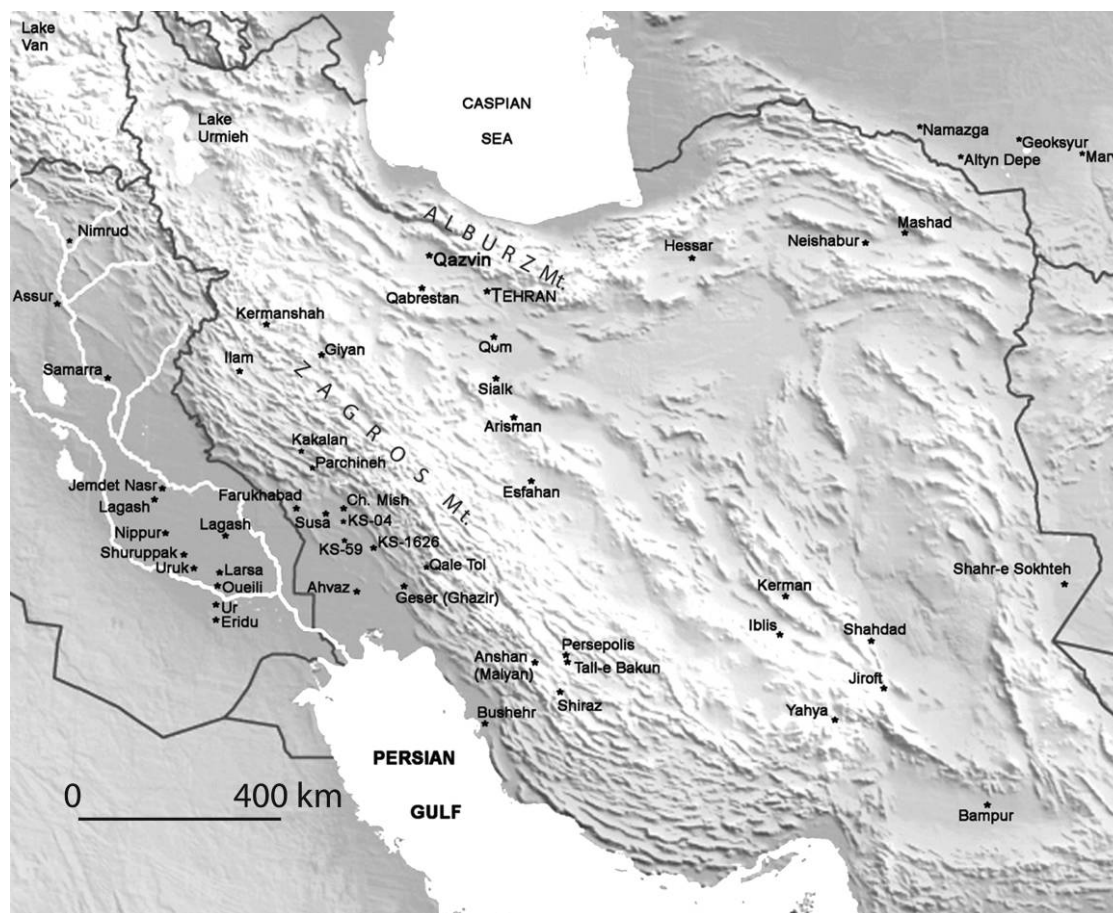



Figure 1. Archaeological sites and regions in Iran and Mesopotamia. Ch. Mish = Chogha Mish.

own large tracts of agricultural lands.[3] In the highlands, around September, just before leaving the area, the tribes sow crops (primarily wheat and some barley) that will be covered with snow, sprout in the spring, and be ready for harvest in late spring. The reverse (spring planting, fall harvest) occurs in the lowlands. In both lowlands and highlands, the nomads secure the crops in their own villages or in makeshift storage bins (see Garthwaite 1983:21, 40; Lambton 1953:283; Stack 1882:68, 100). The difficult problem of transporting large quantities of grain while migrating has thus been solved by the practice of farming and storing crops in both the highlands and the lowlands (fig. 5).

Certainly, farming is practiced by a number of other eastern Iranian nomads (Salzman 2000:107–130), but in southwestern and south-central Iran it is much more widespread and productive and less risky. In general, the practice of agriculture by nomads has a strategic significance; it allows for greater independence and flexibility in adapting to the various environmental and political calamities inherent in the pastoral economic system and way of life.[4] Because pastoral nomadism does not allow for much economic growth, variation, and expansion, nomads make use of all the available resources in their environment. Philip Salzman (1972, 1994) calls this common practice by nomads "multi-resource nomadism," which, in resource-poor regions, includes raiding towns and villages.

Compared to other pastoral nomadic tribes in Iran, such as the Komachi of Kerman (Bradburd 1994) and the Yamut Turkmen of northeastern Iran (Irons 1994), the Qashqai and the Bakhtiyari have developed a relatively complex social and political system that at times is only one level below the state; one may even say a state within a state (Barth 1961:128–129; Beck 1986:35, 52; Garthwaite 1983; Oberling 1974:195). Because of the economic and demographic power of these confederacies, their strategic locations, and their relatively com-

3. Sykes (1930:478) estimated that in the early twentieth century, some 100,000 village farmers were under the Qashqai khans' control.

4. For the practice of farming and storage of grains among Zagros pastoral nomads, see Black-Michaud (1974:221); Garthwaite (1983: 39–42); Hole (1978:152); Stark (1941 [1934]:160).

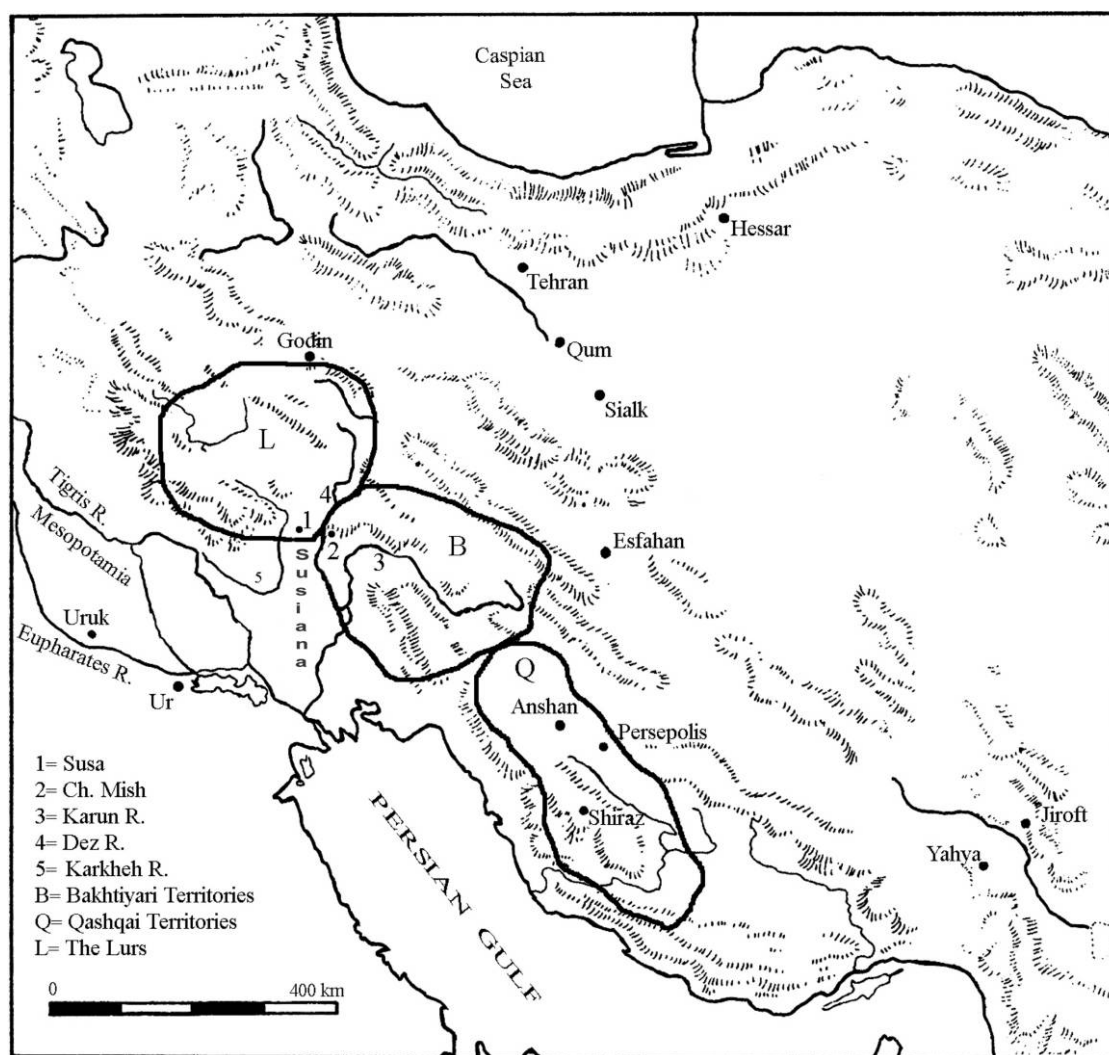
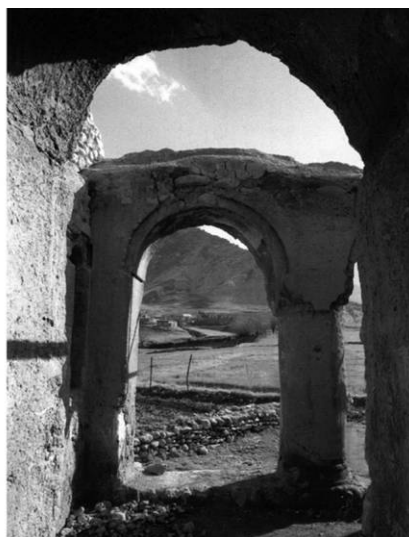



Figure 2. Geographic distribution of the major nomadic tribes in western and south-central Iran. Ch. Mish = Chogha Mish.

plex political hierarchy, they were feared by the state. This, of course, does not mean that various states in Iran were unable to control nomads or to extend state administration to include the nomadic regions. While centralized nation-states with modern technology would not tolerate autonomous areas in their territories, before the rise of the nation-states in the Middle East, the cost of maintaining troops and administrative offices in tribal nomadic regions far exceeded the benefits (see Irons 1979:372).

Even in situations where pastoralists were numerically inferior to the settled farmers, their mobility became an effective equalizer. In the absence of the state or in situations where organized military response could not be immediate, fleet-footed tribesmen could bring a settled population to submission by sheer harassment, even without horses and camels. We may envisage the vulnerability of farmers during or immediately after the harvest: a small band of nomads could easily set fire to the harvest and disappear into the nearby mountains; similarly, flocks of sheep and goats sent by farmers to the nearby hills could easily be stolen. This type of hostility need not be routine; the threat of violence and the possibility of losing livelihood would create a strong strategic advantage for the nomads. Such an intimidating strategy could be successful even within a decentralized state society.

The inherent military advantage of the Zagros pastoralist tribes, which was primarily the result of the rugged geography of their territories and their mobility, should be considered a major factor in their initial sociopolitical development. Studies of the Twaregs of Africa (Sáenz 1991; see also Burnham 1979 and Irons 1979) suggest how mobility and the military capabilities of nomadic groups alone could lead to extortion, which in turn could lead to warrior-client interaction and subsequently to stratification and increased social complexity.

A

B

C

Figure 3. Examples of abandoned khans' residences. *A*, Qaleh (castle) Pourashraf in Ilam, Lurestan; *B*, Qaleh Mir-Hashemi in Ilam, Lurestan; *C*, unidentified *qaleh* in Fars, near Persepolis.

The traditional interest of the Zagros pastoral nomads in farming and their possession of arable land, as well as calm political conditions, encourage some to gradually become sedentary farmers without losing tribal ties and rights. Such sedentarization, however, does not necessarily lead to sedentism; even if it does, the process is by no means irreversible and absolute.[5] This is particularly true in times of economic and political uncertainty, when mobile pastoralists keep their options open for shifting from one way of life to another (Lamb-

5. See especially Edmonds (1957:146). For a different view on the processes of sedentarization, see Galaty et al. (1981) and Salzman (1980).

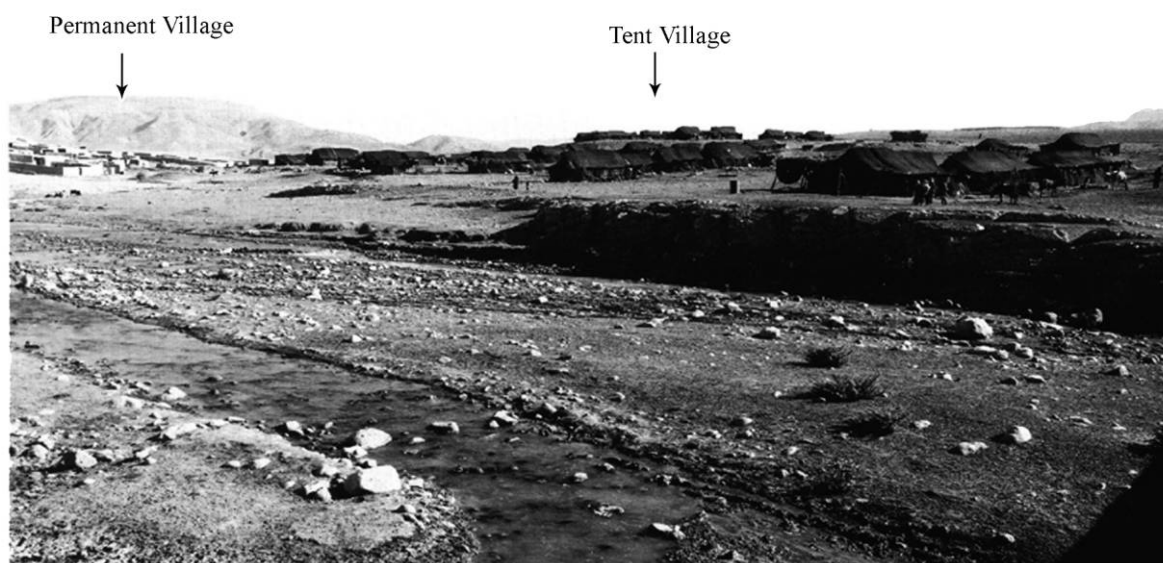
A

B

Figure 4. *A*, Nomadic Qashqai village of Shul Saroii, near Persepolis (photo by Erich Schmidt, Oriental Institute Archives). *B*, Solid-architecture and tent villages of Pela Kabud, Hulailan, Lurestan (after Mortensen 1993).

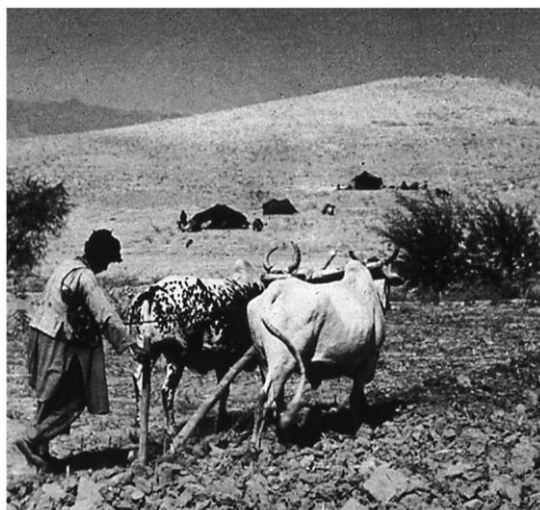



Figure 5. Nomads farming in the Zagros intermontane valleys (after Mortensen 1993).

ton 1953:285–287; Marx 1980:111; see also Adams 1974, 1978). Barth (1961:125) argues that the processes of sedentarization do not constitute a threat to the existence of mobile pastoralism as a system. Poverty and loss of herds due to epidemic and other calamities also encourage temporary settlement (Barth 1964*a*:73; Zagarell 1982:112–113). It is important to bear this adaptive mechanism in mind when interpreting settlement patterns and population fluctuations in regions where this way of life is or was possible.

The reverse process, however, is difficult, if not practically impossible. Settled farmers with no nomadic tribal membership could not simply become nomads, as many archaeologists tend to think occurred in regions with a marked reduction in the number of occupation sites. Most traditional village farmers in the Middle East own a few sheep and goats and perhaps a cow or two. Apart from the major problem of acquiring the right to use pasture lands that belong to nomadic tribes, pastoral nomadism as a viable subsistence economy requires a minimum of 60 animals, which is clearly beyond the reach of most settled farmers (Barth 1961:16–17; Garthwaite 1983:28). The periodic shift from farming to pastoral nomadism can be successfully achieved only if the farm-

ers had become farmers through the process of sedentarization discussed above, that is, as former pastoralists with membership in the regional nomadic tribe. Nevertheless, this difficulty can exist only if the two modes of subsistence operate separately and in opposition; once combined with an overarching tribal structure, as the early Elamites seem to have done, *all* the members of that society could practice pastoral nomadism or settled farming as the conditions required.

*The khans as the agents of change.* Historical sources and ethnographic studies of the Zagros pastoralists testify to the desire of the khans to acquire land and their interest in developing farming and even irrigation (Beck 1986:37, 2003: 298–299; Black-Michaud 1974:228; Garthwaite 1983:30). While the practice of agriculture by rank-and-file nomads provides insurance against environmental calamities that can wipe out entire flocks, farming and possession of farmland have political consequences for the khans. The most important impediment to the political and economic aspirations of nomadic khans lies in the special system of the nomadic subsistence economy (Garthwaite 1983:34–36). The relative political weakness of nomadic khans within the tribal structure stems from the fact that they had little control over the system's economic base, which fluctuates, is inherently unstable, and has little room for variation and expansion. Furthermore, the fluid nature of nomadic life makes it difficult for the khans to exercise any rigorous political and economic control over their subjects. It is therefore imperative—perhaps also visceral—for the khans to expand the nomadic production base and demography to include farming and settled farmers. Once this goal was achieved, pastoral and agricultural resources would reinforce one another in a much wider context, within which further political development could be possible.

## The Proposed Model

We can now present a heuristic model with the hope of encouraging further, specific research in the region to fill the many gaps in the available archaeological data. Admittedly, the evidence of long-term nomad-farmer interaction in southwestern Iran is at present very limited. This dearth of evidence seems to have resulted in part from the difficulties of conducting long-term archaeological investigations in the mountains but more importantly from the lack of specific models that would encourage and guide goal-oriented research in the region. This model is formulated with the latter concern in mind.

This model revolves around the idea that social hierarchy could develop in the Zagros valleys with arable land and enough precipitation for dry farming and that the circumscribed conditions of these valleys would encourage the expansion of the political and economic base of the tribal khans to include the demographic and economic resources of the lowlands. Successful unification of the highland and lowland resources as well as the easily defensible heartlands in the mountains, control of major trade routes, and the preservation of a tribal structure with strong bonds between the rulers and the ruled created a series of durable and strong states that eventually gave rise to the historical "federative" state of Elam.

Most of the process just described fits well with Charles Spencer's (1998) model of primary state formation. Spencer offers three solutions, based on predator-prey relations, for the elites to extract resources from their followers when their demand for tribute is beyond the available local resources: increasing demands from their subjects, intensifying production, and expansion of territory. Given the limitation of land and resources in the highlands, as well as the fluid nature of nomads, the first two solutions are not practical within a pastoral tribal society. The third solution remains the only viable alternative for the ambitious khans. Therefore, territorial expansion and subjugation of agriculturally rich regions seem to be the main processes through which archaic highland khans expanded their power base, a long process in which ecological and economic factors, as well as human aggression, no doubt had major roles in shaping the subsequent Elamite states. These factors are not the products of history, ethnic displacement, and migration.

We can envisage that in prestate southwestern Iran, the first step for an ambitious khan seeking to increase his political power would be to forge a confederation of affiliated tribes to counterbalance real or perceived hostile groupings in the region, for competition over resources, political ambitions, and ethnic tensions are not the products of the state but the seeds of its growth and development. Competition among the khans within the system of nascent chiefly polities and opposition to others outside the system would advance the initial political development and the generation of an ideology of chiefly sanctity that would facilitate exaction of tribute, which would in turn contribute to the development of chiefly hierarchy (Wright 1994:71, 81). The resulting chiefly centers would grow more complex by annexing their neighbors and creating a class of subordinate khans (see Flannery 1999*b*).

The forging of a tribal confederation, therefore, does not necessarily require a military threat from a state society; in the absence of the state, conflicts between tribal regions can be catalytic. In such cases, even a loose federation of disparate tribes could be a major step toward statehood. While a tribal confederation within a state society may be prevented from becoming a state, in the absence of the state, forging a confederation or interregional alliances may be a necessary, though certainly not sufficient, first step in that direction. Forging a tribal confederation also becomes a decisive strategy because the federation can operate regionally over vast areas (see Earle 1994); the resulting hierarchy would then be in a position to generate overarching levels of sociopolitical organization not present in any one segment of the society. Once armed conflict becomes a major concern in a tribal region, then the size of the confederation becomes a decisive variable for further growth and cohesion of the confederation (see Irons 1979:368).

Although a necessary step, the forging of a confederation

Table 1. Relative chronology of Iran and Mesopotamia

| Date BC | Susiana | Fars | Central Plateau | Mesopotamia |
|---|---|---|---|---|
| 1000–500 | Late Elamite | Shogha/Teimuran | Iron II/III | Neo-Babylonian |
| 1500–1000 | Mid-Elamite | Kaftari/Qale | Iron I | Kassite |
| 1900–1550 | Old Elamite (Sukkalmah) | Kaftari | Late Bronze | Old Babylonian |
| 2100–1900 | Old Elamite (Shimashki) | Kaftari | | Isin/Larsa |
| 2350–2100 | Old Elamite (Awan) | Hiatus | Middle Bronze | Akkadian, Ur III |
| 2600–2350 | ? (Early Dynastic) | Hiatus | | Early Dynastic |
| 3000–2600 | Proto-Elamite | Late Banesh | Early Bronze | |
| 3900–3000 | Susa II (Uruk) | Lapui/Early Banesh | | Uruk |
| 4000–3900 | Terminal Susa I | Lapui | Late Plateau | Terminal Ubaid |
| 4500–4000 | Late Susiana 2 (Susa I) | Bakun A | | Ubaid 4 |
| 4800–4500 | Late Susiana 1 | Tall Gap/Bakun B2 | | |
| 5400–4800 | Late Middle Susiana | Bakun B2 | Middle Plateau (Cheshme Ali) | Ubaid 3 |
| 5600–5400 | Early Middle Susiana | Bakun B1 | Early Plateau | Ubaid 2 |
| 5800–5600 | Early Susiana | Jari B | Archaic Plateau | Ubaid 1 |
| 6100–5800 | Archaic Susiana 3 | | | Ubaid 0 |
| 6300–6100 | Archaic Susiana 2 | Mushki | | Hassuna |
| 6500–6300 | Archaic Susiana 1 | | | |
| 6700–6500 | Archaic Susiana 0 | Arsanjan Cave Site | | Jarmo |

does not eradicate the inherent instability of pastoralism and fluidity of nomadic tribes, which militate against its further development into a state. The political hierarchy of the confederation would have to expand its economic and demographic base to include farming and settled farmers. Once the khans reached this level of integration, through the acquisition of land and the integration of farming into pastoral economy as a much more secure and manageable source of surplus, they would be in a position to use the coercion that would be necessary for the development and maintenance of state organizations.

## Archaeological and Historical Perspective

### *Southern Mesopotamia*

With this short overview of some of the major characteristics of vertical mobile pastoralism in southwestern and south-central Iran, we can now turn to the admittedly meager available archaeological and historical records to see when this way of life developed and how it might have influenced the cultural trajectories of this region. The picture that emerges is in sharp contrast to that in Mesopotamia. While the following is an extremely rough and general outline of the development of urban states in Mesopotamia, it should serve our main purpose of contrasting them with the various nonurban states of the highlands that characterize much of the political development in the Iranian plateau.

Beginning with the earliest attested occupation of southern Mesopotamia (Ubaid 0 at Tell el-Oueili; Huot 1996), this region and southwestern Iran (Archaic 3 phase at Chogha Mish) exhibited a shared repertoire of material culture that reached its zenith during the Ubaid 2/early Middle Susiana phase (fig. 1; table 1). Beginning in the late sixth or early fifth millennium BC, however, the two regions diverged. Ubaid 2 material culture developed in its artistic tradition during the Ubaid 3 and 4 phases and expanded into northern Mesopotamia and even Syria and southeastern Anatolia. Similarly, Middle Susiana material culture penetrated the interior of the central Zagros Mountains as well as highland Kerman and Fars, where it replaced the local pottery traditions (Alizadeh 2006*b*). The reorientation and cultural expansion of southern Mesopotamia and Susiana may be addressed in terms of rapid population growth, the development of a local elite class, and a regional exchange network that developed to obtain natural resources, such as timber, stone, and copper, that were found in the highlands of Iran and northern Mesopotamia, as well as pastoral production, including wool. Therefore, we may consider the late sixth or the early fifth millennium as a period of increasing interaction between the lowlands and the highlands in both regions.

After the initial divergence, southern Mesopotamian population centers seem to have grown steadily in size without any single site dominating the region. This trend, of course, changed in the fourth millennium, when Uruk became the largest site in southern Mesopotamia. The unprecedented growth of Uruk was checked in the third millennium, when a number of other large regional centers, such as Shurupak, Nippur, Lagash, Umma, and Ur, developed, creating a landscape in which a number of independent polities or city-states with their own rulers and supporting hinterlands were competing for regional hegemony. Half a millennium of competition resulted in the supremacy of Akkad when Sargon unified the region and forged a proto-empire (see Rowton 1980). This, of course, did not last. But after a period of political fragmentation and defeat at the hands of the highlanders from the Zagros, the Ur III dynasty forged a much

more powerful state. This oscillation between unification and fragmentation (Yoffee 1988, 2005) continued until the sixth century BC, when Mesopotamia became part of the Achaemenid Empire.

While the causes for the collapse of the Akkadian and Ur III states are many and complex, the fact remains that both states were overthrown by highlanders, paving the way for the Semitic tribes to the west (the Amorites; Postgate 1995:43–45), who had already been penetrating Mesopotamia, to establish themselves as the new ruling ethnic groups. In the process, Elam had become powerful enough to control the Diyala region and to establish royal liaison with the powerful kingdom of Mari. Despite the energetic initiatives taken by Hammurabi, his successors eventually fell victim to first the Hittites and then the Kassites, who if not mobile pastoralists, may have originally come from the Zagros Mountains (Summerfeld 1995). Unlike their predecessors, who basically followed a policy of divide-and-conquer/rule (Rowton 1980:296), the Kassites seem to have followed a policy of integration of the tribes surrounding Babylonia (see Rowton 1980). The Kassite policy of integration and containment seems to have been successful, for they managed to have a long period of peace and endured much longer than any other local dynasties in Babylonia before the appearance of the Persians on the scene. Nevertheless, the Kassites, too, after a long and prosperous rule in Mesopotamia, were finally overthrown by the Elamites.

### *Lowland Susiana and the Highlands*

*Physical and ecological characteristics.* Lowland Susiana is often referred to by archaeologists and historians as an extension of the Mesopotamian plain (figs. 1, 2). This is, of course, true geologically and to some extent ecologically; both regions consist of flat, alluvial, fertile land with major rivers. Nevertheless, there are also some fundamental differences between the two regions that must have contributed to their specific long-term trajectories of cultural development. Lowland Susiana is much closer to the mountains, and the entire width of the plain can be crossed on foot in less than a day. Before the introduction of modern canal irrigation technology, the center of the plain was crisscrossed by many small natural streams that could be easily tapped for small-scale irrigation. In the upper Susiana plain, the pebbly soil is fed by underground springs and a high water table from the seepage of the Karkheh and the Dez, rendering the area ideal for both pasture and dry farming (Adams 1962:110). In 1961, when archaeological and geomorphological evidence from Khuzestan was much more limited, Adams (1962) observed that

> Elamite military prowess did not derive from a large, densely settled peasantry occupying irrigated lowlands in what is often loosely considered the heart of Elam. Instead, the enclave around Susa must have been merely one component in a more heterogeneous and loosely structured grouping of forces. (115)

In the eastern sector of the plain, before the area was cut by the numerous wadis that today mark the landscape, seasonal floodwaters were distributed widely across the area, making the practice of recessional, or *décrue*, farming possible (Alizadeh et al. 2004). Today, this area constitutes the heart of the winter pasture land of the Bakhtiyari tribes, and compared with the lands on the west bank of the Karun, ancient villages there, especially before the second millennium BC, are rare, as are modern-day villages.

Unlike in southern Mesopotamia, dry farming is possible, and major canal irrigation does not seem to have been practiced until the middle of the second millennium BC at the earliest (Alizadeh et al. 2004). If this was the case, then unlike in southern Mesopotamia, there could not have been fierce competition between upstream and downstream irrigators, which Adams (1974) considers a major source of conflict and perhaps a practical reason for the development of urban life and fortified cities as an adaptive measure against the uncertain conditions of farming. The slope of the plain is also much steeper in upper Susiana (on average, a drop of 1.3 m every kilometer) than it is in southern Mesopotamia, with much more effective drainage and much less risk of salinization.

*Surrounding piedmonts and highlands.* With all its abundant natural resources and ideal conditions for both pastoralism and farming, lowland Susiana is only one part of the environmental system within which the Elamites operated. The other part consists of a number of intermontane valleys in the Zagros Mountains that vary in area from 50 to 250 km$^2$, where Zagros pastoralist tribes spend the summer months at elevations between 800 and 2,000 m above sea level. Most of these valleys are fertile, with seasonal marshes or small expanding and contracting lakes that provide excellent conditions for natural irrigation. While these narrow valleys, with rugged topography and few natural passes connecting them to their neighbors, are suitable for farming and pasture, they have limited potential for internal development (see Hole 2007). Because of the limitations in resources and area in these intermontane valleys, growth in nomadic herds and population would have had to be diverted to the lowlands or to the much lower altitudes in Fars and even Mesopotamia. In the Ur III period, this "surplus" population served both as mercenaries and as settlers (Michalowski 2008). Hole (1978:158) argues that unlike agricultural production, where many hands are needed and desired, the nomadic system cannot support more people than is necessary to tend the animals. The Zagros nomadic peoples, therefore, also contributed to the growth of settled farming communities in both Iran and Mesopotamia. Similarly, in analyzing the Baluch pastoralists, Barth (1964*b*:19) observes, "Thus as population increases the relative contribution of pastoralism to subsistence decreases, and all households will be uniformly forced by the scarcity of pastures to reduce their stock and rely heavily on agriculture."

### *Archaeological Clues in the Lowlands*

Let us now follow the events in lowland Susiana, highland Fars, and the valleys of the Zagros Mountains. Before the founding of Susa on the western part of the plain, Chogha Mish was the largest population center in lowland Susiana (Alizadeh 2008*b*; Delougaz and Kantor 1996). By the end of the sixth millennium, Chogha Mish had grown much larger (ca. 15 ha) than the other sites in the region; then, presumably because of a violent event, its monumental building was burned and the settlement, along with a number of its satellites, was abandoned. The subsequent Late Susiana 1 (LS 1) phase (ca. 4800 BC), witnessed a marked shift of settlements from the eastern to the western part of Susiana, a regional reorganization of the settlements that may have been caused by "pastoral pressure" (Alizadeh 1992; Hole 1987*a*; Kouchoukos and Wilkinson 2007). This is the time when Susa was founded and replaced Chogha Mish, on the opposite side of the plain, as the largest population center. During the Late Susiana 2 (LS 2/Susa I) phase, the settled population of the plain appreciably decreased, and Susa's contemporary settlements consisted of small villages scattered on the plain, primarily west of the river Dez.

The demise of Chogha Mish in the fifth millennium and the founding of Susa on the opposite side of the plain, with the rivers Karun and Dez as buffer zone, may have been the result of the initial conflict of interest between the pastoralist and farming communities of the region, as there was no contemporary nearby population center in the area that could have posed a serious danger to Chogha Mish. We mentioned above that eastern Khuzestan, where Chogha Mish is located, has been used by a large number of the nomadic tribes as their winter grounds, and there is now some archaeological evidence of the existence of ancient pastoral people in the same area (see below). In our model, therefore, we assume that this pattern, which is dictated by the region's geographical features, also obtained in late prehistoric times. If so, then the population growth in this area around the turn of the sixth millennium may have created increasing demands for more land to be brought under cultivation, which in turn would have reduced vital resources, such as pasture and fuel, and hindered the movement of herds. This scenario demands archaeological evidence.

*Further archaeological evidence of conflict.* Susa and its smaller satellites enjoyed relative peace and prosperity until sometime around 4200 BC, when, just as at Chogha Mish earlier, its most prominent building was demolished and burned (see Hole 1990). A similar fate befell Chogha Dosar (KS-04), another large contemporary settlement east of Susa, where we excavated in 2004. There we discovered a monumental mud brick platform, at the base of which burned mud bricks and ashes more than a meter thick had accumulated. Trenches above and away from this platform did not produce the same burned debris (Alizadeh et al. 2004–2005).

The spatial limitation of signs of violence at Chogha Mish, Susa, and KS-04, all dated to the early or late fifth millennium, suggests a pattern with a remarkable parallel in the highlands of northern Mesopotamia. The contemporary White Room at Gawra level XII, too, seems to have been singled out for destruction without damage to much of the rest of the settlement. Flannery (1999*a*) uses ethnographic analogies of chiefly societies to argue that such buildings (e.g., the White Room, as well as the Chogha Mish Burnt Building, Susa's High Terrace, and whatever structure existed on the mud brick platform at KS-04) may have belonged to high-ranking khans and their retinue and that such buildings, not necessarily the entire settlement, were routinely targeted for violence by competing khans.

*Dar Khazineh (KS-1626), a late sixth–fifth-millennium nomadic campsite in the lowlands.* In a completely fortuitous way, we now have further archaeological evidence of the presence of ancient pastoral nomads in the lowlands. In our 2001 survey in eastern Khuzestan (Alizadeh 2008*a*; Alizadeh et al. 2004), we chose to excavate a late prehistoric site (Dar Khazineh, KS-1626) southeast of the provincial town of Shushtar (fig. 1) to explore the LS 1 phase, during which Chogha Mish remained abandoned. In this part of the Susiana plain, both prehistoric and historical sites are buried under some 2 m of alluvium. As a result, sites in this area are visible only in the exposed sections of the wadis that have sliced into the plain (figs. 1, 6). Excavations in our main trench revealed a peculiar depositional pattern not reported from any other sites on the plain. Clayish and sandy sediments 5–10 cm thick were sandwiched between thin lenses of cultural deposits. We found no solid architecture, only fragments of badly preserved pisé partition walls, whose faces were usually burned. We also found postholes, traces of ash, middens, and fire pits. Excavations at other parts of the site revealed a single burial with stone grinding implements and a copper pin. The revealing evidence of the ephemeral nature of the site was the fact that the surfaces on which such remains were found consisted of alluvium. We believe that this type of stratigraphy can occur when a site lacks solid architecture and is repeatedly occupied (in winter) and left exposed to the elements for several months (in midspring and summer).

### *Archaeological Clues in the Highlands*

Two separate but complementary projects in western and southwestern Iran produced important results. One involved a series of surface surveys and limited excavations in some Zagros intermontane plains as well as in the small marginal plains surrounding Susiana (Wright 1979, 1984, 1987; Wright and Redding 1979; see also Alizadeh 2003). On the basis of location, spatial relations, types of soil, and water availability, most of the sites were considered to be seasonal nomadic campsites or villages. Some of these valleys also contained a central site larger that the others in the area; in some periods,

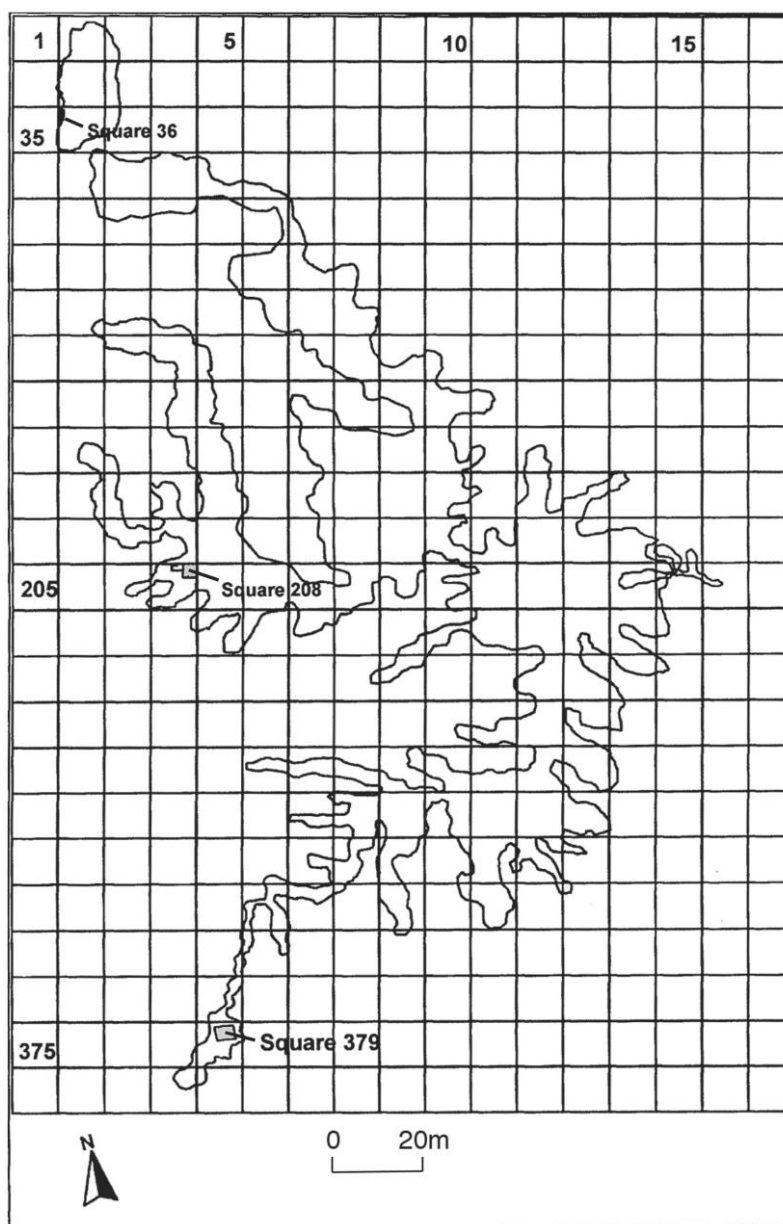



Figure 6. Map of the nomadic site of Dar Khazineh, northeastern Khuzestan.

the valleys contained only a single large site.[6] This sparse, two-tiered settlement pattern with a relatively large, dominant population center in the middle is reminiscent of the eighteenth- to twentieth-century fortified administrative and settlement centers used by the tribal khans in their territories. Zagarell, too, in his analysis of the Bakhtiyari Mountains, recorded a bimodal site hierarchy in the fifth millennium (Zagarell 1989:289). The most important pattern that emerged from these surveys was that population fluctuations in these valleys somewhat matched those in lowland Susiana (Wright 1987:149). While we may never know the causes of this parallelism, these surveys show how closely the events in lowland Susiana were linked with those in the highlands.

*The cemeteries of Hakalan and Parchineh.* The other project consisted of a series of long-term surveys in the western Zagros Mountains to locate isolated ancient nomadic cemeteries. In the early 1970s, Vanden Berghe (1987) discovered two major cemeteries, Hakalan and Parchineh, some 80 km north of Chogha Mish (figs. 1, 7); these can be considered the oldest and most secure archaeological evidence of ancient pastoral

6. For a synthesis of the results of these works, see Wright (1987).

people in the highlands of western Iran. Vanden Berghe excavated the two communal cemeteries, one of which (Parchineh) dates to the fifth millennium, coinciding in date with the abandonment of Chogha Mish and its satellites in eastern Khuzestan. In both cemeteries, recovered objects included pottery vessels, stone and copper mace heads, stone vessels, stone hammers and axes, stone beads, and especially stamp seals (figs. 8, 9). The most interesting characteristic of the cemeteries' artifacts, particularly the pottery vessels, is the various regional styles they exhibit, representing Mesopotamia, lowland Susiana, and highland Iran (fig. 8*B*–8*E*).[7]

Because of the apparent absence of child burials at these cemeteries, it is difficult to speculate about the acquired versus hereditary status that would have existed in the community represented by these cemeteries. But the obvious continuum of the material richness of the tombs at the two cemeteries is an indication of at least a ranked society. At this level of social evolution, which does not seem to be much different from that of the contemporary lowlands, and with nomads' military superiority over the settled farming communities, it is not difficult to assume that a conflict of interest, presumably initially over grazing land, may have resulted in violent confrontations with the settled farming community that may have lasted until the crystallization of the Elamite state in the early third millennium.

### *Additional Clues from the Highlands of the Central Plateau*

The fifth millennium marks a period of increasing contact between the lowlands and the highlands. With its easily distinguished painted pottery that uses many small dots as filling motifs, the LS 1 phase coincides with the demise of Chogha Mish and the appearance of the prehistoric highland cemeteries. This late prehistoric ceramic has the widest spatial distribution of any prehistoric pottery in Iran, appearing in Susiana, Deh Luran, Fars (Middle Fars 1 and 2), the central Zagros, and the Iranian Central Plateau.[8] A remarkable line of evidence for contact between southwestern Iran, Fars, and the Central Plateau, comes from a series of surveys conducted in an area 120 km south of Tehran (Kaboli 2000). This is a region well known for its copper mines and strategic location between points east and points west and southwest, in the general axis of the later Khurasan and Silk roads.

In the Central Plateau, LS 1 black-on-buff ceramics (fig. 7*A*) were found in at least six mounds, side by side with the typical local late Cheshmeh Ali black-on-red ceramics.[9] Archaeological surveys in the same region resulted in the discovery of examples of dot-motif pottery mixed with that of the contemporary late Cheshmeh Ali phase (Barbara Helwing, personal communication). Cheshmeh Ali pottery has not been reported in the Zagros region, but the pottery of the next phase, Sialk III, has been discovered in the Zagros region (Levine and Young 1987, figs. 10:50.2–5, 12:10, 17:1–12; Stein 1940, pls. 11:6, 12:5–6, 14–15; Zagarell 1982, figs. 23:3, 11–12, 15, 24:2–3).

If the appearance of the typical southwestern ceramics in the Central Plateau had anything to do with trade in copper ore and semiprecious stones (lapis and turquoise), Zagros pastoralists would have been in an ideal position to conduct it; their mobility, familiarity with the landscape and the natural passes through the mountains, and opportunistic nature would have encouraged them to act as intermediaries between lowland Susiana, highland Iran, and perhaps even Mesopotamia, creating a network of interregional exchange that lasted for at least 2 millennia. Admittedly, we do not have any direct archaeological evidence of long-distance trade conducted by the highland pastoral nomads. However, considering that trade routes in the Middle East connecting resource-poor southwestern regions to the resource-rich regions in the east and northeast went through the mountains and pastoral nomadic territories, even in the absence of other historical evidence, the pastoral nomads would have been in the most favorable position to be the agents of this early exchange system, an enterprise extremely hazardous for an entrepreneur from a settled farming community. Sometime around the early third millennium, the penetration of a new group of people from the Caucasian region with a specific gray-black pottery (Kura-Araxes) into the western part of the Central Plateau, Azerbaijan, and northern Iranian Kurdestan disrupted this old network of exchange and presumably gave rise to the development of maritime trade in the Persian Gulf (cf. Alden 1982 and Oates et al. 1977).

### *The Fourth Millennium: Wright-Johnson Model of Early State Formation*

As a prelude to the events in the fourth millennium, it is necessary to introduce the model of state formation developed by Henry Wright and Gregory Johnson. As the reader will notice, our proposed model is not entirely in opposition to that of Wright-Johnson; rather, our model is not confined to lowland Susiana but deals with a much longer time period and covers much larger territories, in which the main actors were mobile pastoralists. Our model also considers the fourth millennium not as the main stage of social complexity in southwestern Iran but as a protracted episode in a long series of temporary successes and failures of the regional polities to forge lasting state organizations in the third millennium.

Fifth-millennium highland Fars and lowland Susiana seem to have experienced the development of highly complex societies. Nevertheless, according to the only systematic inter-

7. Compare Haerinck and Overlaet (1996, fig. 42:1–3) with Tobler (1950, fig. 125:137); Haerinck and Overlaet (1996, fig. 47:5) with Safar, Mustafa, and Lloyd (1981, pl. 18:3); Haerinck and Overlaet (1996, fig. 87:1–7) with Woolley (1955, pl. 14); Haerinck and Overlaet (1996, fig. 58:3–5) with Tobler (1950, fig. 178:38–39); and Haerinck and Overlaet (1996, fig. 25:3–4) with Woolley (1955, pl. 15:2070).

8. See Alizadeh (1992:21–26) for detailed comparisons.

9. For examples, see Kaboli (2000), pls. 19:1, 29:1–3, 33:15–16, 36:10, 37:1–5, and 39:11.

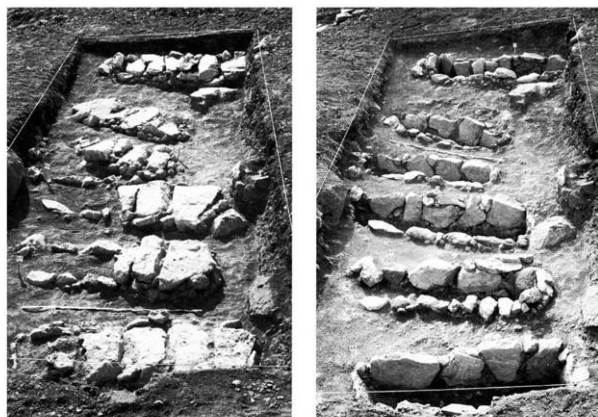



Figure 7. *A*, *B*, Hakalan Cemetery Area A and B tombs; *C*, Hakalan Area A; *D*, Parchineh Area A. After Haerinck and Overlaet (1996).

Figure 8. *A*, Samples of Late Susiana 1 ceramics. *B–E*, Ceramics from the cemeteries of Hakalan and Parchineh. After Haerinck and Overlaet (1996). Scale bars = 10 cm.

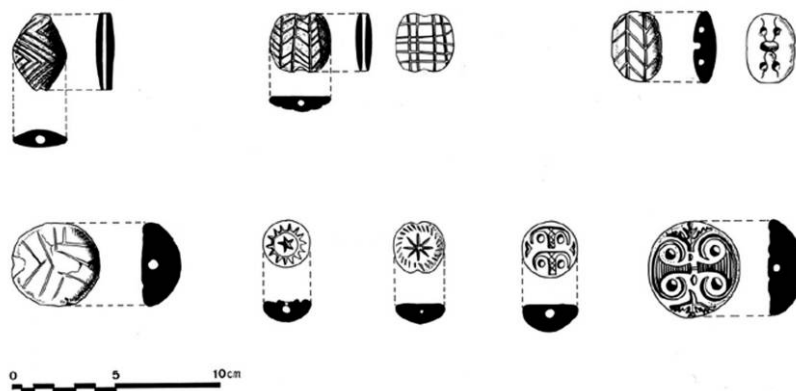



Figure 9. Stamp seals from Hakalan (*A*) and Parchineh (*B*). After Haerinck and Overlaet (1996).

pretation, the development of state organizations in southwestern Iran took place in the early fourth millennium in lowland Susiana (Johnson 1973; Wright and Johnson 1975). Among the most important criteria marshaled to demonstrate state organizations archaeologically are monumental buildings; administrative technology and control; craft specialization; planned architecture designed to segregate residential, production, and administrative quarters; and a four-tiered settlement hierarchy, all of which are amply documented in the fourth millennium in both southern Mesopotamia and lowland Susiana.

Briefly, the basic tenet of the Wright-Johnson (1975) model is that demographic and environmental fluctuations would give rise to increased demand for goods and foodstuffs, which would in turn result in specialization in labor and production. This development would then create administrative problems in managing production and exchange. These problems would be resolved by the gradual centralization of administrative responsibilities into the hands of a specialized administrative hierarchy. In time, higher-order nodes of settlement and administration would emerge, until the entire system was integrated into a hierarchical system with a single city at the apex. This system is represented archaeologically by a four-tiered settlement size hierarchy with evidence of administrative technology in the upper three tiers. Furthermore, Wright and Johnson hypothesized that in the early fourth millennium, an influx of mobile pastoralists created increased demand in goods, a crucial point that they did not expound. It is assumed that, in response to the increased demand within the area, different communities began to specialize in the production of particular kinds of goods and services, the distribution of which was managed by the hierarchically organized administrative system.

The dynamics that resulted in the emergence of state organizations in Susiana are couched in a social evolutionary frame that spans the entire fourth millennium (for critiques, see Yoffee 2005). According to Johnson (1973), the three evolutionary stages in the process include formative (Early Uruk), consolidation (Middle Uruk), and systemic-collapse (Late Uruk) phases. These phases are defined archaeologically by the presence of specific ceramic types, by specific settlement patterns, and by specific population densities. Johnson (1973) makes a case that in Susiana, pottery production and distribution were administered by central authorities residing in the three major population centers: Susa, Chogha Mish, and Abu Fanduweh (KS-59; fig. 1). Moreover, the rapid growth of state organizations, with their attendant elites, must also have fostered the procurement of raw materials not found in the lowlands. An exchange mechanism on a large scale then required a formal and impersonal system of record keeping.

Wright and Johnson emphasized the centralized production of material goods (primarily pottery, presumably because this item is the most tangible in archaeological records, especially in surface surveys) and competition among rival production centers in Susiana: Susa, Chogha Mish, and KS-59. Because there is no grossly obvious variation in shape and other attributes of Susiana's fourth-millennium pottery, Johnson used minute measurements of the angles of handles, appliqué decorations, lips, and so on to distinguish the products of the three competing ceramic workshops and administrative and distribution centers. According to Johnson, three spheres of exchange formed in the immediate hinterlands of these large population centers; of these, Susa prevailed over the course of a few hundred years, becoming the sole seat of power in Susiana.

### *Evidence of Social Complexity before the Fourth Millennium*

I do not intend to make a case that the late prehistoric sites of Bakun A and Susa (Susa 1 period, Acropolis, levels 27–25) represent state societies, but with the exception of the four-level settlement hierarchy,[10] which may be interpreted as a consequence of population growth and further development of intraregional interaction, all the other criteria already existed in both the lowlands (Susa) and the highlands (Tall-e Bakun A; Alizadeh 2006*b*) in the fifth millennium. Given the evidence of socioeconomic complexity that existed before the fourth millennium, the socioeconomic organization of the society in Susiana may have differed from its predecessors more in scale than in stage.[11] In addition to monumental buildings, physical segregation of administrative, production, and domestic quarters, craft specialization, and centrally controlled distribution of goods, both Susa and Bakun exhibited a complex administrative technology that was crowned by door sealings.

Of these characteristics, the use of door sealings is perhaps the most important clue to the level of socioeconomic complexity in a given society. Door sealings are conically shaped lumps of clay with a flattish base (fig. 10). They were used to protect rooms and their contents from unauthorized entry. Obviously, a lump of clay is hardly a deterrent against unauthorized entry; rather, it is the attending sanction that underlies its social and political importance. In the absence of this sanction, door sealing would be an exercise in futility. Elsewhere (Alizadeh 2006*b*:16–18, 87–90), I have argued, following the insights of Sahlins (1967, 1968) and Wallace (1971), that the development and use of door sealings can be interpreted as a strong indicator of a transition from a kinship-based, transient, face-to-face system of exchange to the higher level of a more permanent, impersonal social form that must be a requisite for the later state societies.

### *Susiana in the Fourth Millennium*

The Wright-Johnson model does not address the major question of how and why the material culture of Susiana in the fourth millennium suddenly parallels that of southern Mes-

10. See Haas (1982:143–146) for a critique of the four-level settlement hierarchy as a criterion for state societies.

11. See also Lamberg-Karlovsky (2003) and Frangipane (2000) for a detailed discussion.

Figure 10. Samples of door sealings from Tall-e Bakun A.

opotamia for about 1,000 years. Our model treats this phenomenon in the following section.

Whatever the real cause of the violent events that took place in fifth-millennium Susiana may have been, Susa shrank to about 5 ha and the regional population drastically decreased ca. 4000–3900 BC. The diverging trends that began in the late sixth millennium continued until sometime in the fourth millennium, during the Uruk period, when Susiana is thought to have been colonized by people from southern Mesopotamia (see below). Around 3600 BC, Susa grew again to about 20–25 ha, and Chogha Mish, after a short and spatially limited reoccupation during the second half of the fifth millennium, was reoccupied and reached its previous size of 17 ha. By the end of the fourth millennium, Susa had again shrunk to about 10 ha (Alden 1987), and KS-59, 12 km southeast of Susa, remained occupied, but to the east Chogha Mish and most of its satellites once again were abandoned. Chogha Mish never regained its prominent position on the plain, and northeastern Susiana did not recover its population density until the first half of the second millennium BC.

The "colonization" of lowland Susiana by people from southern Mesopotamia is a unique event in the fourth millennium, for while the Uruk expansion in northern Mesopotamia, eastern Syria, and southeastern Anatolia is represented by individual sites and, in most cases, Uruk and Uruk-related materials are mixed with local artifacts, the cultural material assimilation in fourth millennium Susiana is almost complete. This unprecedented similarity in material culture was used by Algaze (1989, 2001) as strong evidence of colonization of the region by people from southern Mesopotamia. The major reason Algaze offered for Uruk colonization is the procurement of raw materials not found in lowland Mesopotamia. While this may be the case for the sites with Uruk and Uruk-related material in the highlands and piedmonts, lowland Susiana does not offer any raw materials not found in southern Mesopotamia, and therefore the reason for the colonization, if that was the case, of the Susiana plain must have been quite different: perhaps taking advantage of the vast tracts of available fertile land. Looked at from this angle, the evidence suggests that a more appropriate and much less controversial term would be "migration" from southern Mesopotamia and resettlement of the plain by the highland pastoralists.

### *Susiana and Its Hinterland in the Fourth Millennium*

There is much discussion on the evolution of population growth and settlement patterns in fourth-millennium Susiana. From Johnson's estimate of site size (Johnson 1973, table 18), during the most populated Middle Uruk phase, the total size of the settled area in Susiana reached ca. 110 ha, including the three major centers of Abu Fanduweh, Chogha Mish, and Susa. Considering that the entire Susiana population of the Late Uruk period could have fitted in the contemporary city of Uruk alone, even in the mid-fourth-millennium, large tracts of cultivable land and pasture would have been readily available (table 2).

The fourth-millennium cultural landscape of the Deh Luran and Ram Hormuz plains, the northwest and southeast extensions, respectively, of the Susiana plain, is also peculiar. In the late fifth millennium, the plain of Deh Luran, which in terms of material culture had previously been in lockstep with Susiana, developed a local tradition of painted pottery vaguely similar to that of Susa I. This localization of material culture became even more pronounced in the first half of the fourth millennium; unlike the contemporary Susiana, which shows a material cultural assemblage almost identical to that of southern Mesopotamia, the early and middle phases of the Uruk period in Deh Luran are characterized by a few forms mixed with ceramics that are predominantly of highland tradition (Hole 1987*a*, 1987*b*:79–96; Neely and Wright 1994; Wright 1981). Considering that Deh Luran is a natural cor-

Table 2. Total area of occupation (ha) in Iran (Susiana and Fars) and southern Mesopotamia (after Alden 1987)

| Period | Iran | Mesopotamia |
|---|---|---|
| Early dynastic | 72 | 894 |
| Jamdat Nasr/Proto-Elamite | 79 | 523 |
| Late Uruk | 88 | 484 |
| Early Uruk | 127 | 478 |

ridor that links Susiana to points west and northwest, we expect a parallel development in the material culture of the two contiguous plains.

This fourth-millennium picture of Deh Luran is paralleled in the Ram Hormuz plain, the southeastern sector of Susiana. This plain, too, was the major winter grounds of some of the Bakhtiyari tribes, whose khans resided in a mud brick fortress at what is now the provincial center of the town of Ram Hormuz. The mostly saline plain is unsuitable for grain agriculture but is ideal for pasture (Alizadeh 2006*a*; Wright and Carter 2003:64–65). With the exception of one 0.3-ha site (RH-03) of the Early Susiana phase, only a few very small sites, scattered on the plain, were occupied during the Middle Susiana phase (early fifth millennium). In the northwestern sector of the plain, Tall-e Geser (RH-01)[12] was established during this period (Caldwell 1968). While Geser grew to be the largest center in the plain, until it was temporarily abandoned by the mid–third millennium, the rest of the plain was sparsely occupied until the Middle Elamite and later periods. Yet, until the second millennium BC, the pattern of a single large site and a two-tiered settlement system obtains here as well.

In the fifth millennium, the intermontane valleys to the east, northeast, and southeast of Susiana exhibited a local variation of the lowland tradition. In the fourth millennium, Susiana was surrounded by highland areas with a strong local tradition and a few examples of lowland ceramics. The fragmentation of the regional culture in lowland Susiana, Deh Luran, and Ram Hormuz in the fourth millennium may be taken as another episode of a failed process of state formation in the region. In the third millennium, lowland Susiana merged with the highlands in terms of material culture, especially ceramics. With the available archaeological data, it is impossible to enumerate the actual causes for the breakdown in the sphere of cultural interaction in southwestern Iran, but it seems that both Susiana and its hinterlands went through cycles of intensive settled farming and mobile herding until the two were successfully combined in a single political economy in the third millennium.

### *Susiana in the Third Millennium and the Rise of the Elamite State*

The process of early state formation in both southern Mesopotamia and southwestern Iran, which we believe began in the fifth millennium, seems to have run its course by the end of the fourth millennium (Wright 1977). But the outcome was drastically different in the two regions: southern Mesopotamian major population centers grew and consolidated their hinterlands, while Susiana became depopulated or, more appropriately, "desettled" (see below). This desettlement of the farming community was followed, if not caused, by half a millennium of cultural and perhaps political domination by Mesopotamia, until the emergence of the first historically known Elamite state. Between the beginning of the apparent failed state in Susiana and the appearance of Mesopotamian powers there, there are perhaps 200–300 years of a period known as Proto-Elamite, documented at Susa Acropolis Levels 16–14a (early Susa III phase). The period is known as Proto-Elamite because Vincent Scheil (1904) assumed that the language represented by the large number of tablets found beneath Elamite levels at Susa was an earlier version of Elamite. Proto-Elamite administrative tablets remain undeciphered, but they seem to contain entries on disbursements of sheep, goats, and their products, labor lists, and grains (Dahl 2005). The script itself suggests a language different from that used in the Proto-Sumerian tablets of southern Mesopotamia, but most of the numerical systems used in these tablets seem to have been adopted from Mesopotamia (Damerow and Englund 1989).

The wide geographic range of a special painted pottery of the early third millennium may be a reflection of yet another regional integration of various highland and lowland polities. The dominant ceramic of the Proto-Elamite phase has strong affinities with those found the Zagros valleys north of Susiana and in the Deh Luran and Ram Hormuz plains and, to some extent, with that of the contemporary Kur River Basin in highland Fars. It also shares many features with the contemporary pottery known from the Diyala and Hamrin regions, where it is known as Jamdat Nasr and Early Dynastic I pottery (see Carter 1986; Haerinck 1986). Considering that these two Mesopotamian regions had been the locus of the winter pastures of the Pusht-e Kuh pastoral nomads (see, e.g., Layard 1846: 46–47; Stark 1941 [1934]:48–62)[13]—even today, people on either side of the border have relatives on the other side—this new pattern of similarity in ceramics may be viewed as a result of a coalition and close contact among the mobile pastoral tribes in this region of southwest Asia. This presumed third-millennium coalition with the central Mesopotamian region is echoed in the interest of the various Elamite dynasties in the Diyala and Hamrin areas in the second millennium, a strategic alliance necessary to provide access for the highlanders to points west.[14] If the general similarities in material culture of western Iran and central Mesopotamia are taken as indicating a pattern

12. The correct name of the site and the village next to it is Geser, which must have been misheard by McCown, its original discoverer and excavator, as "Ghazir."

13. Layard observed that "during the summer the tribes [Beni Lam Arabs] congregate near that river [the Tigris] and on the borders of the vast inland marshes formed by its waters. In the sandstone and gypsum hills running parallel to the great range, or in the plains at the foot of the mountains, they mix with the Feili tribes of the Pushti-Kuh, and pasture their flocks on their lands for which they yearly pay a small sum to the Wali Ali Khan [Luri khan]. They are usually on good terms with the inhabitants of the mountains, whose chiefs continually take refuge in their tents when opposed by the government, or expelled by their own tribes. The Arab Sheikhs at the same time frequently seek asylum among the I'hiyats [sic., Illiat = tribes] of the hills. Thus it is for their mutual interest to be on friendly terms."

14. The use of donkeys, domesticated in the first half of the third millennium and so vital in overland trade, could also have contributed to the widespread distribution of similar artifacts in western Iran.

of interregional tribal alliances, such alliances then provided a mechanism through which Proto-Elamite administrative tablets could be widely distributed.

### *Interregional Network of Exchange in the Early Third Millennium*

The known Proto-Elamite tablets have a wide geographic distribution. They have been found at sites as far as the Iranian Central Plateau (19 from Sialk, one from Hissar, and one from Uzbaki), Kerman (27 from Yahya), Sistan (one from Shahr-e Sukhteh), Fars (32 from Malyan), and the Ram Hormuz area (one from Geser), but the majority come from Susa (more than 1400). In addition to the fact that Susa has produced most of the known Proto-Elamite tablets, the entries recorded on the tablets found there are much longer than those found at other sites, including Malyan and Yahya (Dahl 2005; Damerow and Englund 1989), suggesting that Susiana was the main hub of Proto-Elamite exchange network and administration, although Sumner (1986) suggested Early Banesh as the precursor of the Proto-Elamite civilization (see also Potts 1999:81–84).[15] Moreover, the contemporary Banesh-period pottery found at Malyan has a comparatively limited repertoire of shapes and designs, with some general similarities to that found in lowland Susiana, Deh Luran, and the central Zagros regions (see also Alden 1982:624, 1987).[16] In contrast, both the monochrome and polychrome ceramics from Susiana, Deh Luran, and Ram Hormuz have much closer affinities with pottery of the western Zagros valleys and the Diyala and Hamrin regions in central Mesopotamia, and they are absent in Sumer. The shared material-culture tradition between central Mesopotamia, highland Elam, lowland Susiana, Deh Luran, and Ram Hormuz may be interpreted as the increasing influence of the nascent Elamite state in central Mesopotamia, when we observe that the first and second adversaries of the central Mesopotamian state of Kish in the Sumerian King List are represented by Elam and Awan (Jacobsen 1939:85, 95),[17] from the highlands and not lowland Susiana (see "Summary").

### *Forces of Production in Southwestern Iran in the Early Third Millennium*

Most anthropologists would agree that the organizational characteristics of a society would closely match its size (Sanders 1984:16–27; Service 1962).[18] This, however, seems to be the case primarily in agrarian and urban societies. As we see below, the evidence of an unprecedented network of exchange recorded in the Proto-Elamite script, with its center presumably at Susa, is in sharp contrast to the almost empty landscape of Susiana, Deh Luran, and Ram Hormuz in the early third millennium. John Alden (1982) hypothesized that during the Proto-Elamite period, Susa was a port of trade with Mesopotamia and the highlands. This is a logical conclusion if we interpret the material synchronically. Alden's synchronic analysis of the period does not explain the forces of production and the presiding administrative hierarchy. Given the long-term cultural development in southwestern Iran, as outlined above, a nonurban polity could be the most likely force capable of producing sheep, goats, their products, and manpower, as well as of conducting or presiding over interregional trade in a seemingly almost empty Susiana landscape.

Grain production, however, may remain unexplained only if we adhere to the standard notion that a sharp drop in the number of settlements in post-Uruk Susiana equals depopulation and that pastoral nomads are incapable of producing grains. This sparse settlement pattern does not necessarily mean that we should not expect to find archaeological remains of temporary farmsteads in lowland Susiana. Even though the region has been the subject of large-scale land development in the past 50 years, careful, intensive surveys designed to find shallow sites, especially in the eastern sector of the plain, which has not been subjected to the same land development, should produce some evidence.

Given the environmental features of upper Susiana and the fact that sedentarization among Zagros pastoral nomads is common and reversible, we can envisage a situation in which vast tracts of land in upper Susiana could be easily farmed by the Zagros nomads without their actually having to live en masse in fixed settlements on the plain. We therefore may consider the meager size and small number of settlements in Susiana during this period to be a result not of the region's depopulation but of what could be termed "desettlement," a process in which a large portion of the population does not leave a region permanently but reverts to a life of pastoral nomadism without leaving much archaeological evidence behind. If Susiana was resettled by both farmers from Mesopotamia and pastoralists from the highlands in the fourth millennium, the growth of settlements and population in the course of time may once again have created a conflict of interests that would leave no option for the foreign settlers but to leave the region. This process, of course, could have taken a long time during the second half of the fourth millennium (Johnson 1973).

15. Others (Alden 1982:624; Young 1986:226) consider highland Fars as the source of Susa III.

16. In Fars, the only evidence so far of a related polychrome ceramics comes from an isolated nomadic cemetery of Jalyan (see Miroschedji 1974).

17. The various unidentified early Zagros polities that are mentioned in Mesopotamian sources as allies of Elam would be analogous to the various tribes within the Qashqai or Bakhtiyari confederations. Potts (1999:92) places Awan in central Zagros.

18. Until at least the second millennium (see Alizadeh et al. 2004), there is no evidence of large-scale canal irrigation in Susiana. This perhaps is another factor that contributed to the major differences between Susiana and Mesopotamia; for the impact of irrigation on the society, see Adams (1968) and Kappel (1974).

*The Consolidation of the Elamite State*

The consolidation of what seems to have been a loose coalition of highland polities in western Iran may have materialized in the second half of the third millennium, as the tribal khans became wealthier and more powerful through their control of the trade in turquoise, lapis, steatite vessels, and tin to Early Dynastic Mesopotamia: the royal cemetery at Ur is only one known example of the wealth of materials that came from the highlands. When historical records—primarily of Mesopotamian origin—appear, we have a series of highland polities that seem to be very different from those that developed in Mesopotamia. Most scholars consider the later Elamite state as a type of *Bundesrepublik* that included smaller highland polities or tribal entities, with Susiana and Fars as the two major components.[19] The role of other regions, such as Kerman (Marhashi?),[20] Hidalu, Bashime, Huhnur, Zabshali, etc., in Elamite power and its durable political system cannot be ignored. While it is possible that these regions were ruled by local khans allied to the ruling Elamite court, they must have been considered worthy adversaries by Mesopotamian monarchs, who referred to them as "kings."[21] Surveys in the Jiroft valley (fig. 1; Majidzadeh and Pittman 2008) and excavations at the large site of Konar Sandal indicate not only a powerful regional system that seems to have been integrated into the larger Elamite confederation but also a likely geographical location for the powerful "kingdom" of Marhashi (fig. 11), which had ambassadors in southern Mesopotamian courts (see Michalowski 2008).

The consolidation of the Elamite confederation through the integration of the various highland tribes or polities may have been made necessary as an adaptive response to the expansionist policy and military campaigns of Mesopotamian centralized urban states, especially those conducted by the Early Dynastic, Akkadian, and Ur III states. For much of the second half of the third millennium, Susiana became the prize fought over by Mesopotamian and highland forces. For at least several hundred years, Susiana was under direct or indirect control of Mesopotamia. However, control and subjugation of lowland Susiana was not synonymous with the demise or collapse of the Elamite state.

The Elamites nonetheless were heavily influenced by the high Mesopotamian culture. Contemporary archaeological materials betray Mesopotamian artistic tradition, and the textual documents were written in either Sumerian or Akkadian.[22] This was the case even during the mighty Shimashki and Sukkalmah dynasties. The Sukkalmah dynasty, with its well-developed triumvirate ruling system,[23] may be considered as the crystallization of Elamite confederate political structure. In this system, the Sukkalmah (grand regent/king) was the supreme leader; next was the Sukkal (regent) of Elam and Shimashki, usually the brother of the Sukkalmah, and the Sukkal of Susa, a son or nephew of the Sukkalmah (Carter and Stolper 1984:25).[24] No one has offered any convincing argument as to why the Sukkalmah rulers referred to themselves as "grand regents" instead of kings, even though for at least a hundred years they ruled supreme in the region and wielded considerable influence in Mesopotamian politics (Carter and Stolper 1984:16–31). This apparent "modesty" of the Sukkalmah kings may remain a mystery, but it is in accordance with the nonflamboyant attitudes of nomadic khans.

*Some Nonurban Characteristics of the Elamite State*

Archaeological remains even in the heart of Elamite territories betray similar nonurban characteristics, with the exception of those at Susa and, to some extent, Tall-e Malyan, ancient Anshan and sister capital of the Elamites in highland Fars. Malyan is certainly impressive, with a massive city wall that encloses about 200 ha, of which some 130 ha seems to contain occupation area while the remainder appears to be flat, empty space (Sumner 1985:153, 2003:2). Recovered archaeological materials from the Proto-Elamite levels point to an administrative and production center that processed metals, shells, flint, and semiprecious stone (Nicholas 1990). While a few buildings from the Late Banesh (Proto-Elamite) and late Middle Elamite phases (Carter 1996) are certainly monumental in character and size, the intervening Kaftari phase (ca. 2200–1600 BC)—that is, the period of the rise of the powerful Elamite dynasties of Shimashki and Sukkalmah—has not produced much that would be commensurate with Malyan's status as a metropolitan capital city where, in the late third and early second millennia, a number of Mesopotamian princesses were sent to stay and where Ibbi-Sin, the last Ur III king, spent his last years as a refugee (Carter and Stolper 1984:19; Falkenstein 1950) or a captive (Michalowski 1989; see also Potts 1999:143, 157).[25] It is, of course, possible that monumental buildings with administrative

19. Stolper (1982:54) considers the Elamite confederation to have been diverse, with shifting components and power structure; see also Amiet (1986:211).

20. See Vallat (1985), who considers Kerman to be Shimashki; contrast Steinkeller (1982, 2007).

21. Carl Lamberg-Karlovsky kindly reminded me that in the eyes of Sharkalisharri, the last Akkadian king (Westholz 1987), Shulgi, and other Ur III kings (Sigrist and Gomi 1991 in Potts 1999:138), who had arranged interregional marriage alliances with the ruling house of Marhashi, the Marhashi tribal khan was a "king" just as Sa'ud of Arabia was a king in the eyes of England while remaining a tribal chief to his own people.

22. Most of the personal names found in the Akkadian texts from Susa are non-Elamite; even in the Sargonic texts from Mesopotamia itself, the names attributed to the Susians are non-Elamite (Zadok 1994).

23. This system seems to have been in place during the earlier Shimashkian dynasty as well (Carter and Stolper 1984:21–22; Steinkeller 2007).

24. The Sukkalmah triumvirate system is vaguely reminiscent of the Qashqai and Bakhtiyari hierarchy, where the Ilbegi (the vice-paramount chief) is the brother of the Ilkhani (the paramount chief), and the son of the Ilkhani is responsible for the internal affairs of the ruling tribe. See, e.g., Beck (1986:35, 201–208).

25. The same can be said of Pasargadae, with large open areas in between its monumental buildings, and Persepolis, both capitals of the Achaemenids and both with no archaeological signs of an urban setting.

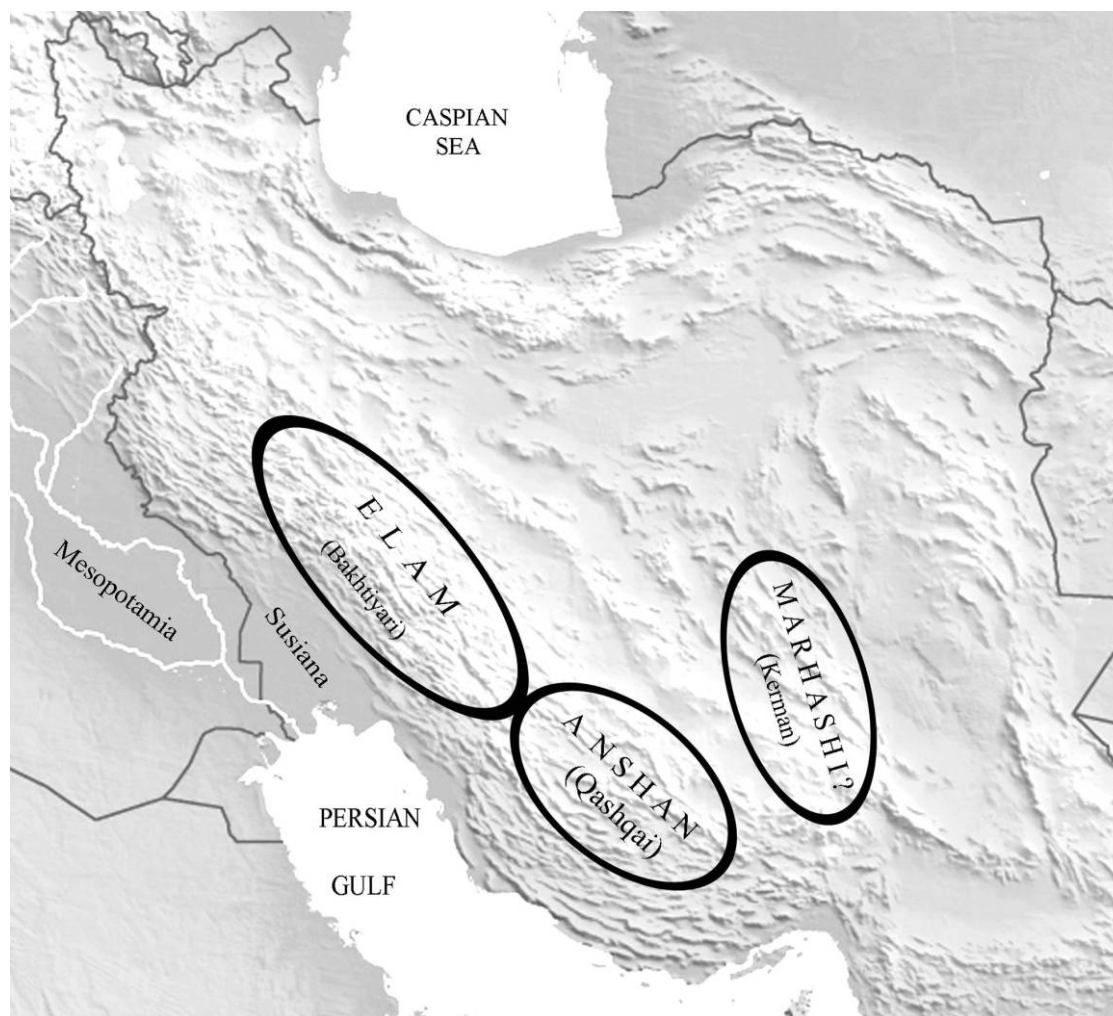



Figure 11. Geographic locations of ancient Elam, Anshan, and Marhashi and the spatial distribution of the Qashqai and Bakhtiyari tribes.

records did exist at Malyan during the Kaftari period; nevertheless, the apparently "modest," undeveloped character of Anshan corresponds well to both the nonflamboyant way of nomadic pastoral societies and the strong possibility that Malyan was not a major material production center during this time. Furthermore, while in the Kaftari period the relatively unimpressive picture of Anshan may be considered an accident of discovery, the topography of the site, with large flat areas, is reminiscent of the nomadic villages in Fars, where large open areas separate ordinary solid architecture (fig. 4*A*).[26] This, of course, does not mean that because Malyan does not look like Susa or Mesopotamian cities, it was nomadic by default. Rather, it may exhibit an intermediate form for which we have no adequate models. Nevertheless, the current picture of Malyan may drastically change with further excavations.

Regardless of the varying richness of material goods and architecture at Anshan, it must have loomed large in the psyche of the inhabitants of southwestern and south-central Iran and Mesopotamia well into the early history of the Achaemenids, the heirs to the Elamites. Upon conquering Babylon, Cyrus the Great made the claim that he was an Anshanite and that his father and grandfather were kings of Anshan. This was a peculiar claim, for Malyan had been deserted long before the Persians became historically known, and there is nothing found at Malyan to indicate the presence of a Persian occupation. Cyrus II, of course, could have meant the region rather than the city. The name Anshan must have been well known to Cyrus's audience and therefore must have enjoyed such high prestige that even long after it had ceased to be a center of power, it still played a symbolic role.

26. See also Stark (1941 [1934]:147–148) for a description of Husainabad (today Ilam), the capital of Pusht-e Kuh, where the khans' residence was surrounded by black tents.

The deceptive physical character of Anshan reminds us of the power of Sparta in the Greek world, which was expressed so powerfully by Thucydides (1972):

> Suppose . . . that the city of Sparta were to become deserted and that only the temples and foundations of buildings remained, I think that future generations would . . . find it very difficult to believe that the place had really been as powerful as it was represented to be. Yet the Spartans occupy two-fifths of the Peloponnese and stand at the head not only of the whole Peloponnese itself but also of numerous allies beyond its frontiers. Since, however, the city is not regularly planned and contains no temples or monuments of great magnificence, but is simply a collection of villages, in the ancient Hellenic way, its appearance would not come up to expectation. If . . . the same thing were to happen to Athens, one would conjecture . . . that the city had been twice as powerful as in fact it is. (I.10)

It was not until the fourteenth century BC that a truly national and presumably loosely centralized Elamite state emerged in southwestern and south-central Iran. For the first time, the Elamites used their own language and script to write documents, invested heavily in large-scale irrigation projects (Alizadeh et al. 2004) that allowed them to colonize the southern part of Susiana, and erected monumental buildings throughout their territories. Nevertheless, the known Elamite texts are highly laconic and rarely contain details and historical information. Furthermore, there is no evidence in Elamite written documents of poetry, hymns, mythology, legends, chronicles, or law codes, to name a few urban cultural productions.[27] This fundamental gap in Elamite written documents cannot be attributed to the careless early excavators of Susa, for from the beginning, the French keenly collected and preserved textual materials. The absence of these important urban activities in Elamite centers does not, of course, mean their absence from Elamite society, in which oral tradition must have prevailed, just as in any nonurban, particularly pastoral society: Herodotus's *Histories* is a vivid example of the extraordinary richness of ancient oral traditions that were rarely represented in the formal, written traditions.

## Summary

In this study, we have marshaled various lines of archaeological evidence concerning the existence of mobile pastoralism in prehistoric western, southwestern, and south-central Iran. With an appreciation of how differential qualities of resources in the Zagros Mountains valleys and in the lowlands affected the development of social evolution in the region, we proposed a model in which ancient mobile highland pastoralists were in a position to dominate the lowlands and create a diversified political economy that included farming, herding, and trade. We argued that the key to the success and durability of the Elamites resided in their diversified economy and the environmental and geographic features of their rugged and easily defensible homelands in the Zagros Mountains.

The various lines of evidence presented above also show how difficult, if not impossible, it is to draw a line between what appear to be regional states in the late fourth and early third millennia in southwest Asia and their precursors of the fifth millennium, which are usually referred to as chiefdoms or complex chiefdoms. There seems to have been a long, arduous road to the crystallization of state in the early third millennium, along which many nascent states repeatedly rose and fell. Nevertheless, one may speak of a number of factors that contributed to the gradual development of state organizations in the early fifth millennium, such as an increase in regional population, improvement of agricultural techniques, the development of local elites, increased demand for goods not locally available, increase in overlapping territories and hostile contact, ambitious khans vying for more power and expansion of their economic base, and so on.

In southwestern and south-central Iran, this millennia-old process culminated with the integration of the lowlands and the highlands, enabling the highlanders to established a durable and powerful state that under different dynasties lasted for more than 2,000 years. The apparent loss of Susiana to Mesopotamian forces in the second half of the third millennium BC was not devastating because the intermontane valleys of the central Zagros and the extensive tracts of fertile agricultural lands in Fars provided the Elamites with the resources necessary not only to survive but to regroup and overthrow the mighty Akkadian and Ur III dynasties. However, when the Iranian tribes penetrated into the Zagros Mountains and presumably displaced the local Elamite population, the Elamites lost their traditional strongholds, and after the Assyrian attack in the mid-sixth century BC and the rise of the Medes and later the Achaemenids, the Elamites practically disappeared as a political entity. The year 539 BC, when Cyrus II conquered Babylon, marks the time when the unification of Mesopotamian lowlands and the Zagros highlands resulted in the creation of three successive highland world empires (Achaemenid, Parthian, and Sasanian) that lasted, with a brief Greek interruption, for more than 1,000 years.

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27. The same is true of the Achaemenids and the Parthians. It was not until the urban-based Sasanians came to power that we see the emergence of literary and historical documents in Iran, with the major exception of Darius's trilingual inscription at Bistun, Kermanshah.

mine. I would also like to thank Ernie Haerinck, Bruno Overlaet, and Inge Mortensen for kindly giving me permission to reproduce figures 4–9 from their publications.

# Comments

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This insightful paper adds conceptual clarity and chronological depth to issues of political and economic organization that have long bedeviled anthropological archaeologists working in southwestern Iran, and while Alizadeh makes some points that I would debate, there is little here that I would strongly dispute. I would, however, like to add some additional data derived from settlement surveys in the Kur River Basin (KRB) of highland Fars, Iran, that relate to his reconstruction of the rise of the Elamite state.

Settlement pattern data from the Lapui (3900–3500 BC), Banesh (3500–2600 BC), Banesh-Kaftari Transitional (2600–2200 BC), and Kaftari (2200–1600 BC) ceramic periods are relevant to the models and issues discussed by Alizadeh. In general, these data are entirely consistent with the processes and patterns taking place over a much larger region and over a longer span of time that he has described. However, a more comprehensive examination of the KRB data adds detail to his proposed developmental sequence.

As described by Sumner (1986, 1988), Lapui-period settlement patterns show a gradual transformation of a Bakun-era economy based on irrigation agriculture into a Banesh-period economy based on pastoral nomadism. From the beginning to the end of the Lapui period, Sumner estimated a decline in sedentary population in the KRB of some 70% (Sumner 1988:31). Using Alizadeh's insightful term, this is a period of desettlement, during which agricultural villages and irrigation systems were gradually but steadily abandoned and dependence on pastoral resources increased.

By the beginning of the Banesh era, this desettlement was largely complete (table 2 in Alden 2009). During the Initial Banesh, there were only 14 ha of positively identifiable settlement in the entire KRB, a valley with more than 3,000 $km^2$ of arable land. During the Early Banesh, there were three small clusters of settlements in the region, each consisting of 5–8 ha of settled area, and 8.5 ha of additional settlement, for a total occupied area somewhere around 25 ha. During the Middle Banesh, the Malyan settlement cluster mushroomed into a city of some 50 ha, but with only 10 ha of positively identified additional settlement in the basin. This pattern continued into the Late Banesh, when a monumental wall was built around perhaps 28 ha of settlement at Malyan but there was only 7 ha of settlement elsewhere in the valley. Sumner suggested that this pattern represents the appearance in the KRB of a new and distinctly highland form of political organization: "a tribal polity, . . . including both sedentary and nomadic elements, . . . sometimes fragmented and sometimes united, under the leadership of tribal khans" (Sumner 1986: 209).

The results of the 2004 excavations at Malyan (Alden et al. 2005; Alden, forthcoming) conclusively demonstrate that there is no extended gap in the occupation of Malyan between the end of the Late Banesh and the beginning of the Kaftari period. In addition, there is a record of gradual, continuous development in ceramics between these two periods. Finally, although Malyan appears to have been considerably smaller during this transitional time than it was in the preceding or subsequent eras, the Middle and Late Banesh pattern of regional settlement—a large central site with minimal permanent settlement elsewhere in the valley—appears to continue through the Banesh-Kaftari Transition.

These settlement pattern data are entirely consistent with the model Alizadeh has proposed for "enclosing" nomadism. More particularly, the data accord with his suggestion that seasonally transhumant pastoralists may have been practicing the ethnographically known pattern of planting crops in highland areas in the fall that they then harvested on their return in the spring. They are also consistent with his "tribal confederation" model of Elamite and pre-Elamite political organization.

The Kaftari-period (2200–1500 BC) settlement pattern in the KRB is entirely different. During this era, as described by Sumner (1989), Malyan grew to a city of 130 ha, and the total occupied area in the region was 278 ha, at least five times the occupied area during any stage of the Banesh. There was a four-stage settlement size hierarchy (one city, three towns, seven large villages, and 82 small villages), evidence of irrigation agriculture, and by Sumner's estimates (1989:148), a population sufficient to produce enough surplus grain "to feed a minimum of 14,000 additional people." "It is not unreasonable to speculate," he adds, "that most of this surplus grain was used in trade with pastoral nomads." As Alizadeh points out, Kaftari-era Malyan has all the characteristics of a highland nexus of a political system in which the productive potential of pastoral nomadism is enclosed within a state system based on irrigation agriculture.

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Alizadeh presents a refreshingly holistic approach to interpreting the rise of the Elamite state that moves beyond traditional models of state formation in the Near East, which too often relegate nonsedentary pastoralists to the role of one of many external stimuli influencing the development of sed-

entary agricultural societies. Scholars are increasingly aware that pastoralism in its many socioeconomic manifestations must be fully integrated into analyses of Near Eastern states. Alizadeh's work demonstrates the efficacy of this approach and addresses one of the fundamental requirements of regional archaeological investigations raised by Johnson (1977): proper definition of the region. All too often in the Near East, scholars have defined regions on the basis of agricultural production and thus have presented an incomplete picture.

This work is part of a larger theoretical movement within Near Eastern archaeology linked to the shift of most field research over the past 20 years from the alluvial plain of southern Mesopotamia to surrounding steppe and upland zones in countries open to archaeologists. In these areas, pastoralism is as important as agriculture, which has presented new methodological and interpretive challenges for a discipline rooted in a tradition of investigating large, highly nucleated urban centers supported by intensive irrigation farming. In Alizadeh's synthesis of developments in southwestern Iran, we see the fruition of this more expansive approach and a challenge to traditional views of the sociopolitical and economic complexity of pastoralists in antiquity.

Pastoralism is a key means for the exploitation of spatially and temporally (seasonally and interannually variable) dispersed resources. In the Near East, pastoral production serves as an adaptation to a harsh and unpredictable climate and the irregular distribution of arable land. I would stress that works such as Alizadeh's that seek to incorporate pastoral production should begin by laying out the exigencies of successful herd management within particular environmental zones, especially the relationship between the annual life cycle of animals, including their varying nutritional requirements, and seasonal resource availability (pasture and fodder). These factors profoundly influence short- and long-term decision making in pastoralist societies but are all too often overlooked. Such information is present in ethnographic and ethnohistoric sources, but in a more direct sense baseline data on landrace species of small ruminants, feed sources, and rangeland are available in modern scientific studies of traditional herd management practices and land use. Alizadeh could also go farther in addressing the differences between horizontal and vertical pastoralism, given the importance of analogies drawn from ethnographic and ethnohistoric sources to his work. Vertical transhumance entails less flexibility in seasonal migratory patterns and therefore generally requires a higher degree of integration with neighboring sedentary groups. In this regard, the pastoralists of the Zagros and Taurus regions differ fundamentally from those that occupied the Jezireh year-round and practiced horizontal transhumance. These distinctions are especially important for understanding relations between southern Mesopotamia and adjacent regions. With regard to the Zagros Mountains and piedmont, one need only look at the differences between the economic and military policies of the Old Akkadian territorial state and those of the Ur III dynasty: the former seems largely to have focused on controlling key centers in northern Mesopotamia (the "horizontal zone"), while the latter sought to dominate the zone of vertical transhumance in the Zagros, with important consequences. One may look at these different political strategies as driven by a desire to exploit agropastoral production within an entire zone, and the key method for accomplishing this is to control supplies of conserved cold-season fodder, the Achilles' heal of transhumant pastoralists in the Near East, and strategic points along seasonal migratory routes.

Overall, I am in general agreement with Alizadeh regarding state formation among agropastoral societies. This examination of the long-term cultural developments in what Rowton (1974) termed a "dimorphic" society is long overdue and has broader theoretical implications beyond southwestern Iran. The archaeological study of agropastoral systems is especially challenging and requires highly integrated, multiscalar research components. Alizadeh is to be congratulated on this thoughtful and original piece of work.

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Study of Iran's pastoral nomads experienced something of a golden age during the two decades preceding the Iranian Revolution of 1978–1979 and the formation of the Islamic Republic of Iran, when anthropologists, historians, and archaeologists conducted research that resulted in numerous publications and conferences. Subsequently, such research, especially fieldwork, became increasingly difficult in Iran and throughout the Middle East. There has been waning interest in pastoral nomadism, including its social and political manifestation in "tribes," given the profound social, economic, and political changes in the past 30 years. Interest in tribes—regardless of definition—has recently resurfaced, but in the context of wars in Afghanistan and Iraq.

Study of pastoral nomads, like research projects generally, is dependent on the crafting of an analysis through the integrative processing of sources/data and concepts. Alizadeh confronts two major problems: how to make sense of the very limited archaeological record of the third through first millennia, and the use of comparison with the nineteenth- and twentieth-century evidence to interpret those archaeological materials. Indeed, are the material remains from, say, the Elamite period even evidence for pastoral nomadism? As for his conceptual framework, Alizadeh stands the long-standing idea of "enclosed" nomadism on its head in the very title of his article by changing it to "enclosing" nomadism, laying the basis, ultimately, for his argument about ancient state formation. For his comparison of the recent with the distant past, he draws on the formation and roles of the great nineteenth- and twentieth-century tribal confederations of the Bakhtiyari and Qashqai in Iran for his analysis.

Richard Tapper (1997:18–24) properly questions historians' use (including my own) of extrapolation from one confederation to another, notably Barth's (1961), but he allows for the general usefulness of comparisons and that

> internal demographic and socio-economic factors and the ecological conditions of nomadic pastoralism have always shaped basic communities, and that larger political groupings, such as confederacies—and indeed tribes—are the product of external political, economic and cultural relations, notably with neighbouring groups and with central authorities. (24)

Tapper's two conclusions summarize Alizadeh's basic assumptions for analyzing his Elamite materials and provide the basis for his supposition that leadership in state formation in the highlands of southwestern Iran came from the "mobile pastoralists" in the adjacent highlands, the Zagros Mountains, and that this historic pattern would be repeated by the Achaemenians (ca. 530–336 BC) and the Sasanians (AD 224–651).

Alizadeh uses his "enclosing nomadism" neologism to make for an analysis more nuanced and useful than Rowton's (1974), but is his other coinage, "mobile pastoralists," more useful than the commonly used "pastoral nomads"? Alizadeh notes the fundamental differences between steppe pastoralism and the mobile pastoralism of the Zagros. Mountain mobile pastoralists shared overlapping economies and space with the agriculturalists but with differences in emphasis that gave the pastoralists an important political and military, hence organizational, edge over the agriculturalists, coupled with the ability of aggrandizing pastoral leaders to form coalitions that could overcome and replace urban polities in the Mesopotamian lowlands and that resulted in their own protostates and then states. (For a fuller discussion of this process, see Garthwaite 2005:13–21.)

The Bakhtiyari and the Qashqai within Qajar Iran of the nineteenth and early twentieth centuries would seem a good fit with Rowton's concept of nomadic societies enclosed within the spheres of urban societies: the Qajar shahs utilized and even created tribal confederacies as administrators of their respective regions. A stronger comparison group for Alizadeh's enclosing nomadism might be the Qajars themselves and their rise to dynastic power in the late eighteenth century, in which "it is the settled farming communities that seem to be enclosed within the much larger sphere of the nomadic society and ruled by a hierarchy that was drawn from various highland tribes."

Alizadeh's use of "enclosing" and "mobile pastoralists" has already been noted, and his use of "khan" is anachronistic as a title for a leader, given the late arrival of the Turks in the Middle East. This brings us back to the issue of evidence and the use of later historical phenomena to explain earlier history. Might not "leader" or "notable" suffice in place of "khan," thus avoiding the social, cultural, and political category of "tribe," for which there is no ancient evidence? More importantly, does the appearance of the great Turkish confederations, beginning in the tenth century AD, lead to the emergence—or resurgence(?)—of pastoral nomadic confederations in Iran, a development that had such an impact on Iranian history? Answering the question of whether it was emergence or resurgence would help determine whether nineteenth- and twentieth-century history can be used to interpret the second and first millennia. One last point: when after many years I was finally allowed to travel throughout the Bakhtiyari, I was struck by how integrated the agricultural and pastoral nomadic economies and culture were but by the significant differences as well (Garthwaite 2009:xi–xx). Alizadeh's same experience in the southwestern Zagros has allowed him to postulate and then throw new light on the possible history of the political economy of Elam.

# Reply

I am very grateful to the commentators for their positive and generous review of this paper. I thank John Alden for marshalling the settlement pattern data in Fars. A similar cycle of growth and decline is also observed in lowland Susiana, though not necessarily in lockstep with the highlands (Miroschedji 2003). Alden seems to make an exception for "Kaftari-era Malyan" as a political system enclosing mobile pastoralism. The large size of Malyan does not necessarily mean control of the pastoralists. In fact, as Alden himself emphasizes the importance of exchange, symbiosis, and integration with the pastoralists, one should expect to see a stable, peaceful farming system that Malyan would have enjoyed. Moreover, my model argues for a subsistence and political economy that combines two sets of complementary resources and a mixed demography on the same coin, where cities, towns, farming villages, and tents and flocks of sheep and goats are integrated into a much larger and more powerful system. While we do not have clear ideas why the settled populations fluctuated, we should remember that the growth of Malyan in the late third and early second millennia corresponds to the powerful Akkadian and Ur III dynasties and the rise of the powerful Elamite Shimashki dynasty, when Susa was either occupied or remained unsafe for the highlanders.

The proposed model was especially reinforced by Michael Danti's comments. Danti, however, wanted more elaboration on the differences between horizontal and vertical pastoralism. Space limitation forced me to adhere to the most salient differences, but I am glad that Danti sheds more light on the fundamental differences between the two.

The comments by Gene Garthwaite are encouraging, as he has conducted major research among the Bakhtiyari and is intimately familiar with the history, ecology, and geography of the region. Garthwaite's characterization of the Qajar dynasty is very useful and provides additional insight to my model. Garthwaite is perfectly right to object to the use of

"khan" when I refer to ancient mobile pastoralist chiefs. The following observations are primarily made to address Garthwaite's mild concern about using historical and ethnographic analogies and to elaborate on some of the points raised by Danti.

From the beginning of Elamite studies, starting with Vincent Scheil (1901), scholars have considered the highlands part of the geography of the Elamites. In the four major works dedicated to the history and archaeology of Elam (Cameron 1936; Carter and Stolper 1984; Hinz 1973; Potts 1999; see also Vallat 1980), the valleys of the Zagros are considered the primary Elamite homeland, with lowland Khuzestan as a fertile land coveted by both the Elamites and the various dynasties in Mesopotamia. At least from the point of view of the highlanders, the attraction of Susiana is understandable, because most of the highland region is unsuitable for grain agriculture but ideal for animal husbandry. So it is perfectly logical to assume that a large segment of the heterogeneous Elamite society consisted of mobile pastoralist tribes who also practiced farming in both the highlands and the lowlands.

Nevertheless, scholars paid little attention to the implications of the Elamites' homeland in the mountains. The only exception is Pierre de Miroschedji (2003), who considers some of the implications of the dual subsistence technology and demographic character of the Elamites but does not consider it the source of major differences between the agrarian Mesopotamian states and society and those of the Elamites. Neither does he consider the Elamite state to be primary because, he argues, pastoral nomadism discourages political unity (Miroschedji 2003:19, 23). It seems to me that the reluctance to even consider the possibility that, in certain ecological and environmental settings, mobile pastoralism could develop state organizations stems from the gripping anthropological construct of a pristine state formation process that is believed to have involved primarily agricultural intensification and the role of "big men." Another problem is the total lack of systematic ethnographic studies of nomads in general and the mobile pastoralists of the Zagros in particular before the introduction of firearms (especially cannons), which put nomads at a military disadvantage. Ethnographers of the late nineteenth and twentieth centuries observed these nomads. In the preindustrial era, and in fact until 100 years ago in Iran, the power of the state, even when equipped with cannons, was inversely proportional to the distance from its center; this equalizing force was even stronger in mountainous regions and in more remote times in history, where the Sumerian and Akkadian "phalanx" was completely useless.

Even if some scholars are open to the model presented in this paper, they may question how we obtain any archaeological evidence pertaining to the nature of the proposed implications of this model. Unlike the various Mesopotamian dynasties, the Elamites seem to have left little useful historical information about themselves. Archaeological remains of their society tell us precious little about myriad tangible and intangible features of the Elamite state and society. Adhering to tangible archaeological and textual evidence of Elam would lead us to no new avenue of inquiry and leaves the Elamites as mysterious as they appear in the available records. The way out of this dilemma is to construct a model that can both shed some new light on the organization and nature of the Elamite state and society and offer fresh avenues of field research. Nevertheless, and regardless of how much more material evidence we can add to the inventory of archaeological and even textual evidence, we will never be free from the process of logical inference where human behavior is concerned.

In major epochs in human social and economic development, such as early domestication, urbanism, and the formation of early states, there are a number of fundamental questions for which almost no archaeological or even textual evidence has been left behind; these will remain archaeologically intangible. Even the most heroic attempt to formulate some purely archaeological indicators to distinguish early states archaeologically involves logical inferences and appeals to ethnographic examples (Johnson 1973; Wright and Johnson 1975).

Anthropologists and archaeologists have obtained significant knowledge from contemporary simple societies of farmers and hunter-gatherers, a knowledge that lies at the heart of a number of anthropological and archaeological theories. Yet temporally and geographically, such societies are very far removed from simple Paleolithic and Neolithic communities. The same is true about contemporary nomadic societies. Yet, to paraphrase Robert O'Connell (1989:19), it is the broad patterns of behavior that can be transferred and continued in similar ecological and environmental settings, while the one-to-one analogies remain suspect. Certainly in the case of Elamites, who left woefully laconic textual materials, this implies that any deep understanding of the structure of their long-lasting society must be derived primarily as a matter of logical inference rather than from the available archaeological and textual evidence.

If we distinguish the core Elamite constituency as consisting of basically mobile pastoralists with strong communal tradition and especially weak internal class division, then it is possible to argue that this constituency was more explosive in experiencing economic shock than the lowland farmers, who had sharper and stronger class divisions. This normative fact (discussed by James Scott [1976]) alone may have been a factor leading Elamite elites to channel their demands for surplus and taxes to the lowland farmers rather than to the pastoralists. This strategy provided the various Elamite dynasties with reliable and strong bonds with the highlanders, who formed the backbone of their society and provided them with safe refuge and manpower in times of crisis. The internal impediments that the mobile pastoralist elites faced in raising taxes and exploiting their kinsmen to advance and improve their economic and political base seem to have risen not from any specific later historical development but from their way of life and the ecology of the region.

Finally, unless we assume that Elamites migrated from an unknown region to southwestern and western Iran in the third millennium, the history of Elam and Elamites can be appreciated only through study of long-term developments in Fars and southwestern Iran at least from the mid-fifth millennium, when the earliest isolated cemeteries appeared in the region, the material culture of lowland Susiana began to develop along path different from that in Mesopotamia, and both the highlands and lowlands began to show shared traditions of material production. Some 2,500 years later, we witness the rise of a dual agropastoralist state that endured throughout the history of Iran, with a few minor exceptions.

—Abbas Alizadeh

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